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2580

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<210> 5396

<211> 760

<212> PRT

<213> Homo sapiens

<400> 5396

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 Ala Ile Val Glu Ile Phe Ser Lys Tyr Gln Lys Ala Ala Glu Glu Thr
 35 40 45
 Asn Met Glu Lys Lys Arg Ser Asn Thr Glu Asn Leu Ser Gln His Phe
 50 55 60
 Arg Lys Gly Thr Leu Thr Val Leu Lys Lys Lys Trp Glu Asn Pro Gly


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Leu Gly Ala Glu Ser His Thr Asp Ser Leu Arg Asn Ser Ser Thr Glu
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Ile Arg His Arg Ala Asp His Pro Pro Ala Glu Val Thr Ser His Ala
      100         105         110
Ala Ser Gly Ala Lys Ala Asp Gln Glu Glu Gln Ile His Pro Arg Ser
      115         120         125
Arg Leu Arg Ser Pro Pro Glu Ala Leu Val Gln Gly Arg Tyr Pro His
      130         135         140
Ile Lys Asp Gly Glu Asp Leu Lys Asp His Ser Thr Glu Ser Lys Lys
      145         150         155         160
Met Glu Asn Cys Leu Gly Glu Ser Arg His Glu Val Glu Lys Ser Glu
      165         170         175
Ile Ser Glu Asn Thr Asp Ala Ser Gly Lys Ile Glu Lys Tyr Asn Val
      180         185         190
Pro Leu Asn Arg Leu Lys Met Met Phe Glu Lys Gly Glu Pro Thr Gln
      195         200         205
Thr Lys Ile Leu Arg Ala Gln Ser Arg Ser Ala Ser Gly Arg Lys Ile
      210         215         220
Ser Glu Asn Ser Tyr Ser Leu Asp Asp Leu Glu Ile Gly Pro Gly Gln
      225         230         235         240
Leu Ser Ser Ser Thr Phe Asp Ser Glu Lys Asn Glu Ser Arg Arg Asn
      245         250         255
Leu Glu Leu Pro Arg Leu Ser Glu Thr Ser Ile Lys Asp Arg Met Ala
      260         265         270
Lys Tyr Gln Ala Ala Val Ser Lys Gln Ser Ser Ser Thr Asn Tyr Thr
      275         280         285
Asn Glu Leu Lys Ala Ser Gly Gly Glu Ile Lys Ile His Lys Met Glu
      290         295         300
Gln Lys Glu Asn Val Pro Pro Gly Pro Glu Val Cys Ile Thr His Gln
      305         310         315         320
Glu Gly Glu Lys Ile Ser Ala Asn Glu Asn Ser Leu Ala Val Arg Ser
      325         330         335
Thr Pro Ala Glu Asp Asp Ser Pro Gly Asp Ser Gln Val Lys Ser Glu
      340         345         350
Val Gln Gln Pro Val His Pro Lys Pro Leu Ser Pro Asp Ser Arg Ala
      355         360         365
Ser Ser Leu Ser Glu Ser Ser Pro Pro Lys Ala Met Lys Lys Phe Gln
      370         375         380
Ala Pro Ala Arg Glu Thr Cys Val Glu Cys Gln Lys Thr Val Tyr Pro
      385         390         395         400
Met Glu Arg Leu Leu Ala Asn Gln Gln Val Phe His Ile Ser Cys Phe
      405         410         415
Arg Cys Ser Tyr Cys Asn Asn Lys Leu Ser Leu Gly Thr Tyr Ala Ser
      420         425         430
Leu His Gly Arg Ile Tyr Cys Lys Pro His Phe Asn Gln Leu Phe Lys
      435         440         445
Ser Lys Gly Asn Tyr Asp Glu Gly Phe Gly His Arg Pro His Lys Asp
      450         455         460
Leu Trp Ala Ser Lys Asn Glu Asn Glu Glu Ile Leu Glu Arg Pro Ala
      465         470         475         480
Gln Leu Ala Asn Ala Arg Glu Thr Pro His Ser Pro Gly Val Glu Asp
      485         490         495
Ala Pro Ile Ala Lys Val Gly Val Leu Ala Ala Ser Met Glu Ala Lys

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Ala	Ser	Ser	Gln	Glu	Lys	Glu	Asp	Lys	Pro	Ala	Glu	Thr	Lys	Lys
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Leu	Arg	Ile	Ala	Trp	Pro	Pro	Pro	Thr	Glu	Leu	Gly	Ser	Ser	Gly
	530					535					540			
Ala	Leu	Glu	Glu	Gly	Ile	Lys	Met	Ser	Lys	Pro	Lys	Trp	Pro	Glu
545					550					555				560
Asp	Glu	Ile	Ser	Lys	Pro	Glu	Val	Pro	Glu	Asp	Val	Asp	Leu	Asp
			565						570					575
Lys	Lys	Leu	Arg	Arg	Ser	Ser	Ser	Leu	Lys	Glu	Arg	Ser	Arg	Pro
			580						585					590
Thr	Val	Ala	Ala	Ser	Phe	Gln	Ser	Thr	Ser	Val	Lys	Ser	Pro	Lys
	595								600					605
Val	Ser	Pro	Pro	Ile	Arg	Lys	Gly	Trp	Ser	Met	Ser	Glu	Gln	Ser
	610					615						620		
Glu	Ser	Val	Gly	Gly	Arg	Val	Ala	Glu	Arg	Lys	Gln	Val	Glu	Asn
625					630					635				640
Lys	Ala	Ser	Lys	Lys	Asn	Gly	Asn	Val	Gly	Lys	Thr	Thr	Trp	Gln
				645					650					655
Lys	Glu	Ser	Lys	Gly	Glu	Thr	Gly	Lys	Arg	Ser	Lys	Glu	Gly	His
			660					665					670	
Leu	Glu	Met	Glu	Asn	Glu	Asn	Leu	Val	Glu	Asn	Gly	Ala	Asp	Ser
	675						680					685		Asp
Glu	Asp	Asp	Asn	Ser	Phe	Leu	Lys	Gln	Gln	Ser	Pro	Gln	Glu	Pro
	690					695					700			Lys
Ser	Leu	Asn	Trp	Ser	Ser	Phe	Val	Asp	Asn	Thr	Phe	Ala	Glu	Glu
705					710					715				720
Thr	Thr	Gln	Asn	Gln	Lys	Ser	Gln	Asp	Val	Glu	Leu	Trp	Glu	Gly
				725						730				735
Val	Val	Lys	Glu	Leu	Ser	Val	Glu	Glu	Gln	Ile	Lys	Arg	Asn	Arg
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Tyr	Asp	Glu	Asp	Glu	Asp	Glu	Glu							
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<210> 5397

<211> 561

<212> DNA

<213> Homo sapiens

<400> 5397

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120

ccccagaaca taagacagga gggagagatg ccatccattc agcgggcact tatgccacg

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accagctgag ccagaccagc attcccattt caccaccct tactectcaa gatgcaaag

240

aagctcaggg ctgggaggaa gctggcaggg ctgtccacag ggaggacccc cgtgtgtctc

300

tcgggctgcc caggtggctc tgtccacct tctgtctggg aggtcctta aggtgggga

360

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420

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<210> 5398
 <211> 154
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 <213> Homo sapiens

<400> 5398
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 20 25 30
 Thr Ser Ile Pro Ile Ser Pro Pro Leu Thr Pro Gln Asp Ala Asn Glu
 35 40 45
 Ala Gln Gly Trp Ala Glu Ala Gly Arg Ala Val His Arg Glu Asp Pro
 50 55 60
 Arg Val Ser Leu Gly Leu Pro Arg Trp Leu Cys Pro Pro Phe Cys Leu
 65 70 75 80
 Gly Gly Ser Leu Arg Leu Gly Arg Ala Gln Arg Glu Gly Asp Pro Glu
 85 90 95
 Gly Leu Ala Asp Ser Gly Pro Pro Cys Glu Leu Arg Phe Glu Glu Glu
 100 105 110
 Ser Arg Pro Pro Arg Val Val Gly Glu Ser Thr Gly Arg Lys Ala Gly
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 Arg Val Met Asn Gln Ile Ala Phe Met Arg
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<210> 5399
 <211> 835
 <212> DNA
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<400> 5399
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 120
 atgggcagta accctcattc tcagcctcag cagagcagtc cgtaccagg aggttcctat
 180
 ggccctccag gccacacagc gtatccaatt ggcacccagg gtcggactcc cggggccatg
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 420

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<210> 5400

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5400

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Gly	Pro	Thr	Met	Gly	Arg	Ser	Gln	Gly	Ser	Pro	Met	Asp	Pro	Met	Val
			20					25					30		
Met	Lys	Arg	Pro	Gln	Leu	Tyr	Gly	Met	Gly	Ser	Asn	Pro	His	Ser	Gln
			35				40					45			
Pro	Gln	Gln	Ser	Ser	Pro	Tyr	Pro	Gly	Gly	Ser	Tyr	Gly	Pro	Pro	Gly
			50				55				60				
Pro	Gln	Arg	Tyr	Pro	Ile	Gly	Ile	Gln	Gly	Arg	Thr	Pro	Gly	Ala	Met
65					70					75				80	
Ala	Gly	Met	Gln	Tyr	Pro	Gln	Gln	Gln	Met	Pro	Pro	Gln	Tyr	Gly	Gln
			85						90					95	
Gln	Gly	Val	Ser	Gly	Tyr	Cys	Gln	Gln	Gly	Gln	Gln	Pro	Tyr	Tyr	Ser
			100						105				110		
Gln	Gln	Pro	Gln	Pro	Pro	His	Leu	Pro	Pro	Gln	Ala	Gln	Tyr	Leu	Pro
			115				120					125			
Ser	Gln	Ser	Gln	Gln	Arg	Tyr	Gln	Pro	Gln	Gln	Asp	Met	Ser	Gln	Glu
			130				135				140				
Gly	Tyr	Gly	Thr	Arg	Ser	Gln	Pro	Pro	Leu	Ala	Pro	Gly	Lys	Pro	Asn
145					150					155				160	
His	Glu	Asp	Leu	Asn	Leu	Ile	Gln	Gln	Glu	Arg	Pro	Ser	Ser	Leu	Pro
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Val	Arg	His	Tyr	Cys	Ala	Asp	Leu	Glu	Met						
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<210> 5401

<211> 2674

<212> DNA

<213> Homo sapiens

<400> 5401

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180
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240
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300
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420
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 2580
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<210> 5402

<211> 507

<212> PRT

<213> Homo sapiens

<400> 5402

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Phe	Lys	Ala	Arg	Pro	Arg	Glu	Phe	Trp	Ala	Arg	Cys	Lys	Arg	Pro	Cys
			20					25					30		
Pro	Arg	His	Val	Ala	Asp	Met	Val	Ile	Ser	Glu	Ser	Met	Asp	Ile	Leu
			35				40					45			
Phe	Arg	Ile	Arg	Gly	Gly	Leu	Asp	Leu	Ala	Phe	Gln	Leu	Ala	Thr	Pro
			50			55				60					
Asn	Glu	Ile	Phe	Leu	Lys	Lys	Ala	Leu	Lys	His	Val	Leu	Ser	Asp	Leu
65					70					75				80	
Ser	Thr	Lys	Leu	Ser	Asn	Ala	Leu	Val	Phe	Arg	Ile	Cys	His	Ser	
			85					90				95			
Ser	Val	Tyr	Ile	Trp	Pro	Ser	Ser	Asp	Ile	Asn	Thr	Ile	Pro	Gly	Glu

100	105	110
Leu Thr Asp Ala Ser Ala Cys	Lys Asn Ile Leu Arg Phe	Ile Gln Phe
115	120	125
Glu Pro Glu Glu Asp Ile Lys	Arg Lys Phe Met Arg Lys	Lys Asp Lys
130	135	140
Lys Leu Ser Asp Met His Gln	Ile Val Asn Ile Asp Leu Met	Leu Glu
145	150	155
Met Ser Thr Ser Leu Ala Ala	Val Thr Pro Ile Ile Glu Arg	Glu Ser
165	170	175
Gly Gly His His Tyr Val Asn	Met Thr Leu Pro Val Asp Ala	Val Ile
180	185	190
Ser Val Ala Pro Glu Glu Thr	Trp Gly Lys Val Arg Lys	Leu Leu Val
195	200	205
Asp Ala Ile His Asn Gln Leu	Thr Asp Met Glu Lys Cys	Ile Leu Lys
210	215	220
Tyr Met Lys Arg Thr Ser Ile	Val Val Pro Glu Pro Leu His	Phe Leu
225	230	235
Leu Pro Gly Lys Lys Asn Leu	Val Thr Ile Ser Tyr Pro Ser	Gly Ile
245	250	255
Pro Asp Gly Gln Leu Gln Ala	Tyr Arg Lys Glu Leu His	Asp Leu Phe
260	265	270
Asn Leu Pro His Asp Arg Pro	Tyr Phe Lys Arg Ser Asn	Ala Tyr His
275	280	285
Phe Pro Asp Glu Pro Tyr Lys	Asp Gly Tyr Ile Arg Asn	Pro His Thr
290	295	300
Tyr Leu Asn Pro Pro Asn Met	Glu Thr Gly Met Ile Tyr Val	Val Gln
305	310	315
Gly Ile Tyr Gly Tyr His His	Tyr Met Gln Asp Arg Ile Asp	Asp Asn
325	330	335
Gly Trp Gly Cys Ala Tyr Arg	Ser Leu Gln Thr Ile Cys Ser	Trp Phe
340	345	350
Lys His Gln Gly Tyr Thr Glu	Arg Ser Ile Pro Thr His Arg	Glu Ile
355	360	365
Gln Gln Ala Leu Val Asp Ala	Gly Asp Lys Pro Ala Thr Phe	Val Gly
370	375	380
Ser Arg Gln Trp Ile Gly Ser	Ile Glu Val Gln Leu Val Leu	Asn Gln
385	390	395
Leu Ile Gly Ile Thr Ser Lys	Ile Leu Phe Val Ser Gln Gly	Ser Glu
405	410	415
Ile Ala Ser Gln Gly Arg Glu	Leu Ala Asn His Phe Gln Ser	Glu Gly
420	425	430
Thr Pro Val Met Ile Gly Gly	Gly Val Leu Ala His Thr Ile	Leu Gly
435	440	445
Val Ala Trp Asn Glu Ile Thr	Gly Gln Ile Lys Phe Leu Ile	Leu Asp
450	455	460
Pro His Tyr Thr Gly Ala Glu	Asp Leu Gln Val Ile Leu Glu	Lys Gly
465	470	475
Trp Cys Gly Trp Lys Gly Pro	Asp Phe Trp Asn Lys Asp Ala	Tyr Tyr
485	490	495
Asn Leu Cys Leu Pro Gln Arg	Pro Asn Met Ile	
500	505	

<210> 5403

<211> 451

<212> DNA
<213> Homo sapiens

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60
c a c g c g c t a g t t c g c g c t g c t g g a t c a g g c t c a g g a t c t c c a g c a c t g a c a a t g g c t c c t
120
t c a t c t t t g g g g g c t c t g g g a c c t t g g g t g g g g c t c t g g a g c t g c c t g c a g g c a
180
c c a c t c t c t c a g c c a g g g a c g c a c g c t g g g g c t n t g g a t c c a c g c c c c a g t c t c a g g a a g
240
g c c a g t c t c c g g g c g g c c t c c c c g c t g c c t c c t c g t c g c c g t g g g c t c g g g t c c c a t g c
300
a g c c g g g c c a g g a g g c c a a a a t c t g c t g a g c t c t g c g t a t c c c t g g t a c c a g c a c a c g g
360
c c c a a g a a a g a g c g g g g g c t g c c c a t c c c c a g g g c t g c c t g c c g c g g c c c g g g g c c c a g e
420
c c a g c c g g a a g g g g g c c a g g c c c g c a a g c t t
451

<210> 5404
<211> 150
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<400> 5404
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Ser Pro Ala Leu Thr Met Ala Pro Ser Ser Leu Gly Ala Leu Gly Pro
35 40 45
Trp Val Gly Ala Leu Glu Leu Pro Arg Leu Gln Ala Pro Leu Ser Gln
50 55 60
Pro Gly Thr His Ala Gly Ala Xaa Asp Pro Arg Pro Ser Leu Arg Lys
65 70 75 80
Ala Ser Leu Arg Ala Ala Ser Pro Ala Ala Ser Ser Ser Pro Trp Ala
85 90 95
Arg Val Pro Cys Ser Arg Ala Arg Arg Pro Lys Ser Ala Glu Leu Leu
100 105 110
Arg Ile Pro Gly Thr Ser Thr Arg Pro Lys Lys Glu Arg Gly Cys Pro
115 120 125
Ser Pro Gly Leu Pro Ala Ala Gly Pro Gly Pro Ser Pro Ala Gly Arg
130 135 140
Gly Pro Gly Pro Gln Ala
145 150

<210> 5405
<211> 1609
<212> DNA
<213> Homo sapiens

<400> 5405

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<210> 5406
 <211> 291
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Lys Tyr Cys Ser Ala Lys Ala Arg His Ser Trp Thr Lys Asp Arg Arg
 50 55 60
 Ala Met Arg Val Met Ser Ile Glu Arg Lys Lys Trp Met Asn Ile Arg
 65 70 75 80
 Pro Leu Pro Thr Lys Lys Gln Met Pro Leu Gln Phe Asp Leu Cys Asn
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 His Ile Ala Ser Gly Lys Lys Cys Gln Tyr Val Gly Asn Cys Ser Phe
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 Ala His Ser Pro Glu Glu Arg Glu Val Trp Thr Tyr Met Lys Glu Asn
 115 120 125
 Gly Ile Gln Asp Met Glu Gln Phe Tyr Glu Leu Trp Leu Lys Ser Gln
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 Lys Asn Glu Lys Ser Glu Asp Ile Ala Ser Gln Ser Asn Lys Glu Asn
 145 150 155 160
 Gly Lys Gln Ile His Met Pro Thr Asp Tyr Ala Glu Val Thr Val Asp
 165 170 175
 Phe His Cys Trp Met Cys Gly Lys Asn Cys Asn Ser Glu Lys Gln Trp
 180 185 190
 Gln Gly His Ile Ser Ser Glu Lys His Lys Glu Lys Val Phe His Thr
 195 200 205
 Glu Asp Asp Gln Tyr Cys Trp Gln His Arg Phe Pro Thr Gly Tyr Phe
 210 215 220
 Ser Ile Cys Asp Arg Tyr Met Asn Gly Thr Cys Pro Glu Gly Asn Ser
 225 230 235 240
 Cys Lys Phe Ala His Gly Asn Ala Glu Leu His Glu Trp Glu Glu Arg
 245 250 255
 Arg Asp Ala Leu Lys Met Lys Leu Asn Lys Ala Arg Lys Asp His Leu
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 Asp Leu Asn
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<210> 5407
 <211> 2010
 <212> DNA
 <213> Homo sapiens

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720
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780
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900
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960
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1080
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1140
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1320
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1680

gaatgacaat tttttgtatt tgctttttct cctttaaga gcacattctt ctgtaaggag
 1740
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 1860
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 1920
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 1980
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 2010

<210> 5408
 <211> 335
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asn Lys Arg Pro Val Ile Arg Met Asn Gly Asp Lys Phe Arg Arg Leu
 50 55 60
 Val Lys Ala Pro Pro Arg Asn Tyr Ser Val Ile Val Met Phe Thr Ala
 65 70 75 80
 Leu Gln Leu His Arg Gln Cys Val Val Cys Lys Gln Ala Asp Glu Glu
 85 90 95
 Phe Gln Ile Leu Ala Asn Ser Trp Arg Tyr Ser Ser Ala Phe Thr Asn
 100 105 110
 Arg Ile Phe Phe Ala Met Val Asp Phe Asp Glu Gly Ser Asp Val Phe
 115 120 125
 Gln Met Leu Asn Met Asn Ser Ala Pro Thr Phe Ile Asn Phe Pro Ala
 130 135 140
 Lys Gly Lys Pro Lys Arg Gly Asp Thr Tyr Glu Leu Gln Val Arg Gly
 145 150 155 160
 Phe Ser Ala Glu Gln Ile Ala Arg Trp Ile Ala Asp Arg Thr Asp Val
 165 170 175
 Asn Ile Arg Val Ile Arg Pro Pro Asn Tyr Ala Gly Pro Leu Met Leu
 180 185 190
 Gly Leu Leu Leu Ala Val Ile Gly Gly Leu Val Tyr Leu Arg Arg Ser
 195 200 205
 Asn Met Glu Phe Leu Phe Asn Lys Thr Gly Trp Ala Phe Ala Ala Leu
 210 215 220
 Cys Phe Val Leu Ala Met Thr Ser Gly Gln Met Trp Asn His Ile Arg
 225 230 235 240
 Gly Pro Pro Tyr Ala His Lys Asn Pro His Thr Gly His Val Asn Tyr
 245 250 255
 Ile His Gly Ser Ser Gln Ala Gln Phe Val Ala Glu Thr His Ile Val
 260 265 270
 Leu Leu Phe Asn Gly Gly Val Thr Leu Gly Met Val Leu Leu Cys Glu

275	280	285
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290	295	300
Ala Gly Ile Gly Leu Val Val Leu Phe Phe Ser Trp Met Leu Ser Ile		
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<210> 5409
 <211> 2019
 <212> DNA
 <213> Homo sapiens

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 1200

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 1320
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 1920
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 2019

<210> 5410

<211> 198

<212> PRT

<213> Homo sapiens

<400> 5410

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Gln	Ile	Glu	Gln	Gly	Met	Asp	Met	Val	Ile	Ser	Ser	Val	Ile	Gly	Glu
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Ser	Tyr	Arg	Leu	Gln	Ser	Met	Gln	Cys	Ser	Ser	Leu	Phe	Gln	Phe	Asp
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Phe	Gln	Glu	Ala	Val	Lys	Asn	Phe	Phe	Pro	Pro	Gly	Asn	Glu	Val	Val
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Phe	Asp	Phe	Phe	Tyr	Trp	Phe	Gly	Leu	Ser	Asn	Ser	Val	Val	Lys	Val
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Thr	Ile	Lys	Leu	Phe	Leu	Glu	Lys	Met	Ser	Glu	Pro	Leu	Ile	Arg	Arg
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Ser	Ser	Phe	Ser	Asp	Arg	Lys	Phe	Ser	Val	Thr	Ser	Arg	Gly	Ser	Ile

145 150 155 160
 Asp Asp Val Phe Asn Cys Asn Leu Ser Pro Arg Ser Ser Leu Thr Glu
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<210> 5411
 <211> 2802
 <212> DNA
 <213> Homo sapiens

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<210> 5412

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5412

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      35          40          45
Asp Leu Cys Val Leu Phe Gly Lys Gly Asn Ser Pro Leu Leu Gln Lys
      50          55          60
Met Ile Gly Asn Ile Phe Thr Gln Gln Pro Ser Tyr Tyr Ser Asp Leu
      65          70          75          80
Asp Glu Thr Leu Pro Thr Ile Leu Gln Val Phe Ser Asn Ile Leu Gln
      85          90          95
His Cys Gly Leu Gln Gly Asp Gly Ala Asn Thr Thr Pro Gln Lys Leu
      100          105          110
Glu Glu Arg Gly Arg Leu Thr Pro Ser Asp Met Pro Leu Leu Glu Leu
      115          120          125
Lys Asp Ile Val Leu Tyr Leu Cys Asp Thr Cys Thr Thr Leu Trp Ala
      130          135          140
Phe Leu Asp Ile Phe Pro Leu Ala Cys Gln Thr Phe Gln Lys His Asp
      145          150          155          160
Phe Cys Tyr Arg Leu Ala Ser Phe Tyr Glu Ala Ala Ile Pro Glu Met
      165          170          175
Glu Ser Ala Ile Lys Lys Arg Arg Leu Glu Asp Ser Lys Leu Leu Gly
      180          185          190
Asp Leu Trp Gln Arg Leu Ser His Ser Arg Lys Lys Leu Met Glu Ile
      195          200          205
Phe His Ile Ile Leu Asn Gln Ile Cys Leu Leu Pro Ile Leu Glu Ser
      210          215          220
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      225          230          235          240
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      245          250          255
Phe Pro Val Ala Glu Asp Ile Ser Leu Leu Gln Gln Ala Ser Ser Val
      260          265          270
Leu Asp Glu Thr Arg Thr Ala Tyr Ile Leu Gln Ala Val Glu Ser Ala
      275          280          285
Trp Glu Gly Val Asp Arg Arg Lys Ala Thr Asp Ala Lys Asp Pro Ser
      290          295          300
Val Ile Glu Glu Pro Asn Gly Glu Pro Asn Gly Val Thr Val Thr Ala
      305          310          315          320
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      325          330          335
Glu Cys Met Gly Ala Ala Ala Val Gly Pro Ala Met Cys Gly Val
      340          345          350
Glu Leu Asp Ser Leu Ile Ser Gln Val Lys Asp Leu Leu Pro Asp Leu
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Gly Glu Gly Phe Ile Leu Ala Cys Leu Glu Tyr Tyr His Tyr Asp Pro

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Pro Leu Leu Thr Ser Arg His Asn Val Phe Gln Asn Asp Glu Phe Asp
      420              425              430
Val Phe Ser Arg Asp Ser Val Asp Leu Ser Arg Val His Lys Gly Lys
      435              440              445
Ser Thr Arg Lys Glu Glu Asn Thr Arg Ser Leu Leu Asn Asp Lys Arg
      450              455              460
Ala Val Ala Ala Gln Arg Gln Arg Tyr Glu Gln Tyr Ser Val Val Val
465              470              475              480
Glu Glu Val Pro Leu Gln Pro Gly Glu Ser Leu Pro Tyr His Ser Val
      485              490              495
Tyr Tyr Glu Asp Glu Tyr Asp Asp Thr Tyr Asp Gly Asn Gln Val Gly
      500              505              510
Ala Asn Asp Ala Asp Ser Met Thr Ser Ser Ser Ala Ala Gly His Ser
      515              520              525
Pro Ser Gln Val Leu Arg Thr Lys Val Pro Arg Glu Gly Gln Glu Glu
      530              535              540
Asp Asp Asp Asp Glu Glu Asp Asp Ala Asp Glu Glu Ala Pro Lys Pro
545              550              555              560
Asp His Phe Val Gln Asp Pro Ala Val Leu Arg Glu Lys Ala Glu Ala
      565              570              575
Arg Arg Met Ala Phe Leu Ala Lys Lys Gly Tyr Arg His Asp Ser Ser
      580              585              590
Thr Ala Val Ala Gly Ser Pro Arg Gly His Gly Gln Ser Arg Glu Thr
      595              600              605
Thr Gln Glu Arg Arg Lys Lys Glu Ala Asn Lys Ala Thr Arg Ala Asn
610              615              620
His Asn Arg Arg Thr Met Ala Asp Arg Lys Arg Ser Lys Gly Met Ile
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<210> 5413
 <211> 1677
 <212> DNA
 <213> Homo sapiens

<400> 5413
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<210> 5414

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5414

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 35 40 45
 Lys Asn Asn Ile Lys Ala Ser Leu His Asn Val Lys Ser Ser Leu Pro
 50 55 60
 Leu Phe Asn Thr Lys Ser Ser Thr Ser Val Gly Gln Leu Gln Ser Pro
 65 70 75 80
 Thr Leu Asn Ser Pro Ile Tyr Met Gln Lys Gln Gly Lys Asn Glu His
 85 90 95
 Leu Ala Phe Asn Thr Lys Ser Lys Ala Ser Thr Val Gly Ser Glu Leu
 100 105 110
 Val Leu Val Ser Thr Thr Val Pro Thr Val His His Val Ser Asp Leu
 115 120 125
 Glu Met Ser Ser Thr Leu Asp Cys Leu Pro Val Leu Ala Asp Trp Glu
 130 135 140
 Asp Val Val Leu Leu Pro Ala Ser Gln Pro Glu Glu Asn Val Asp Cys
 145 150 155 160
 Thr Val Pro Ile Ser Asp Ser Asp Leu Glu Ile Ser Phe Asn Ser Gly
 165 170 175
 Glu Arg Leu Met Val Leu Lys Glu Leu Glu Met Ser Ser His Glu Asn
 180 185 190
 Phe Gly Asp Ile Glu Glu Thr Pro Gln Lys Ser Glu Thr Ser Lys Ser
 195 200 205
 Ile Val Tyr Lys Ser Pro His Thr Thr Ile Tyr Asn Val Lys Glu Ala
 210 215 220
 Lys Asp Pro Gly Ser Asp Ile Ser Ala Phe Lys Leu Pro Glu His Lys
 225 230 235 240
 Ser Ser Thr Phe Asn Arg Val Asn Ala Asn Met Ser His Pro Leu Val
 245 250 255
 Leu Gly Lys His Pro Leu Leu Ser Gly Gly Thr Lys Arg Asn Pro Cys
 260 265 270
 Ser Pro Gln Ala Phe Pro Pro Ala Lys Lys Gln Pro Phe Thr Ile His
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 Glu Glu Lys Pro Thr Ser Ser Asp Cys Ser Pro Val Arg Ser Ser Ser
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 Trp Arg Arg Leu Pro Ser Ile Leu Thr Ser Thr Val Asn Leu Gln Glu
 305 310 315 320
 Pro Trp Lys Ser Gly Lys Met Thr Pro Pro Leu Cys Lys Cys Gly Arg
 325 330 335
 Arg Ser Lys Arg Leu Val Val Ser Asn Asn Gly Pro Asn His Gly Lys
 340 345 350
 Val Phe Tyr Cys Cys Pro Ile Gly Lys Tyr Gln Glu Asn Arg Lys Cys
 355 360 365
 Cys Gly Tyr Phe Lys Trp Glu Gln Thr Leu Gln Lys Glu Arg Ala Asn
 370 375 380
 Ser Met Val Pro Ser His Ser Thr Gly Gly Leu Thr Phe Ser Ser Pro
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<210> 5415

<211> 1493

<212> DNA

<213> Homo sapiens

<400> 5415

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<210> 5416
 <211> 55
 <212> PRT
 <213> Homo sapiens

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 Ala Cys Leu Lys Pro Leu Ser
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<210> 5417
 <211> 2087
 <212> DNA
 <213> Homo sapiens

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 2087

<210> 5418

<211> 528

<212> PRT

<213> Homo sapiens

<400> 5418

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			20					25					30		
Arg	Leu	Leu	Lys	Glu	Pro	Glu	Lys	Glu	Arg	Asp	Ser	Asp	Ser	Asp	Phe
			35					40				45			
Ser	Pro	Leu	Gln	Gln	Thr	Glu	Gly	Cys	Gln	Arg	Arg	Asp	Lys	His	Phe
			50				55					60			
Arg	His	Ala	Glu	Asn	Pro	His	His	Pro	Leu	Lys	Thr	Ser	Ser	Arg	Ala

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					85					90					95		
Lys	Gly	Pro	Val	Ala	Val	Thr	Gly	Ala	Ser	Thr	Pro	Glu	Gly	Thr	Ala		
				100				105					110				
Pro	Pro	Pro	Pro	Ala	Ala	Pro	Ala	Pro	Pro	Lys	Gly	Glu	Lys	Glu	Gly		
				115				120					125				
Gln	Arg	Pro	Thr	Gln	Pro	Val	Tyr	Gln	Ile	Gln	Asn	Arg	Gly	Met	Gly		
				130			135				140						
Thr	Ala	Ala	Pro	Ala	Ala	Met	Asp	Pro	Val	Val	Gly	Gln	Ala	Lys	Leu		
145					150					155					160		
Leu	Pro	Pro	Glu	Arg	Met	Lys	His	Ser	Ile	Lys	Leu	Val	Asp	Asp	Gln		
				165					170					175			
Met	Asn	Trp	Cys	Asp	Ser	Ala	Ile	Glu	Tyr	Leu	Leu	Asp	Gln	Thr	Asp		
			180					185					190				
Val	Leu	Val	Val	Gly	Val	Leu	Gly	Leu	Gln	Gly	Thr	Gly	Lys	Ser	Met		
			195				200					205					
Val	Met	Ser	Leu	Leu	Ser	Ala	Asn	Thr	Pro	Glu	Glu	Asp	Gln	Arg	Thr		
	210					215					220						
Tyr	Val	Phe	Arg	Ala	Gln	Ser	Ala	Glu	Met	Lys	Glu	Arg	Gly	Gly	Asn		
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Gln	Thr	Ser	Gly	Ile	Asp	Phe	Phe	Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe		
				245					250					255			
Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser	Pro	Ser	Ile	Leu	Asp	His	Leu	Ile		
			260					265					270				
Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro	Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr		
		275				280						285					
Val	Glu	Met	Gln	Ser	Leu	Gln	Ile	Ala	Ala	Phe	Leu	Phe	Thr	Val	Cys		
	290					295					300						
His	Val	Val	Ile	Val	Val	Gln	Asp	Trp	Phe	Thr	Asp	Leu	Ser	Leu	Tyr		
305					310					315					320		
Arg	Leu	Trp	Asp	Leu	Gly	Cys	Lys	Cys	Lys	Ser	Asn	Ser	His	Ser	Pro		
				325					330					335			
Gln	Thr	Pro	Arg	Phe	Leu	Gln	Thr	Ala	Glu	Met	Val	Lys	Pro	Ser	Thr		
				340				345					350				
Pro	Ser	Pro	Ser	His	Glu	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Asp	Glu	Gly		
		355					360					365					
Thr	Glu	Tyr	Tyr	Pro	His	Leu	Val	Phe	Leu	Gln	Asn	Lys	Ala	Arg	Arg		
	370					375				380							
Glu	Asp	Phe	Cys	Pro	Arg	Lys	Leu	Arg	Gln	Met	His	Leu	Met	Ile	Asp		
385					390					395					400		

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Gly	Val	Arg	Lys	Ser	Ser	Ala	Leu	Ala	Glu	Tyr	Ser	Arg	Leu	Leu	Ala
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<210> 5419
 <211> 989
 <212> DNA
 <213> Homo sapiens

<400> 5419
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 989

<210> 5420
 <211> 174
 <212> PRT
 <213> Homo sapiens

<400> 5420
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35	40	45
Thr Arg Arg Tyr Tyr Arg Ser	Pro Ser Arg Tyr Arg Ser	Arg Ser Arg
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Ser Arg Ser Arg Ser Arg Gly	Arg Ser Tyr Cys Gly Arg	Ala Tyr Ala
65	70	75
Ile Ala Arg Gly Gln Arg Tyr Tyr	Gly Phe Gly Arg Thr Val Tyr Pro	80
85	90	95
Glu Glu His Ser Arg Trp Arg Asp	Arg Ser Arg Thr Arg Ser Arg Ser	
100	105	110
Arg Thr Pro Phe Arg Leu Ser Glu	Lys Asp Arg Met Glu Leu Leu Glu	
115	120	125
Ile Ala Lys Thr Asn Ala Ala Lys	Ala Leu Gly Thr Thr Asn Ile Asp	
130	135	140
Leu Pro Ala Ser Leu Arg Thr Val	Pro Ser Ala Lys Glu Thr Ser Arg	
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Gly Ile Gly Val Ser Ser Asn Gly	Ala Lys Pro Glu Lys Ser	160
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<210> 5421

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 5421

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<210> 5422

<211> 276

<212> PRT

<213> Homo sapiens

<400> 5422

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			20					25					30		
Thr	Gln	Pro	Leu	Gly	Leu	Leu	Arg	Leu	Leu	Gln	Leu	Val	Ser	Thr	Cys
			35				40					45			
Val	Ala	Phe	Ser	Leu	Val	Ala	Ser	Val	Gly	Ala	Trp	Thr	Gly	Ser	Met
	50					55					60				
Gly	Asn	Trp	Ser	Met	Phe	Thr	Trp	Cys	Phe	Cys	Phe	Ser	Val	Thr	Leu
65					70				75					80	
Ile	Ile	Leu	Ile	Val	Glu	Leu	Cys	Gly	Leu	Gln	Ala	Arg	Phe	Pro	Leu
			85					90						95	
Ser	Trp	Arg	Asn	Phe	Pro	Ile	Thr	Phe	Ala	Cys	Tyr	Ala	Ala	Leu	Phe
			100					105					110		
Cys	Leu	Ser	Ala	Ser	Ile	Ile	Tyr	Pro	Thr	Thr	Tyr	Val	Gln	Phe	Leu
		115				120						125			
Ser	His	Gly	Arg	Ser	Arg	Asp	His	Ala	Ile	Ala	Ala	Thr	Phe	Phe	Ser
	130				135						140				
Cys	Ile	Ala	Cys	Val	Ala	Tyr	Ala	Thr	Glu	Val	Ala	Trp	Thr	Arg	Ala
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Arg	Pro	Gly	Glu	Ile	Thr	Gly	Tyr	Met	Ala	Thr	Val	Pro	Gly	Leu	Leu
			165					170						175	
Lys	Val	Leu	Glu	Thr	Phe	Val	Ala	Cys	Ile	Ile	Phe	Ala	Phe	Ile	Ser
		180						185					190		
Asp	Pro	Asn	Leu	Tyr	Gln	His	Gln	Pro	Ala	Leu	Glu	Trp	Cys	Val	Ala
		195				200						205			
Val	Tyr	Ala	Ile	Cys	Phe	Ile	Leu	Ala	Ala	Ile	Ala	Ile	Leu	Leu	Asn
	210					215					220				
Leu	Gly	Glu	Cys	Thr	Asn	Val	Leu	Pro	Ile	Pro	Phe	Pro	Ser	Phe	Leu
225					230					235				240	
Ser	Gly	Leu	Ala	Leu	Cys	Leu	Ser	Ser	Ser	Met	Pro	Pro	Pro	Leu	Phe
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 <213> Homo sapiens
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<210> 5424

<211> 570

<212> PRT

<213> Homo sapiens

<400> 5424

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Leu	Leu	Thr	Met	Ser	Asn	Asn	Asn	Pro	Glu	Leu	Phe	Ser	Pro	Pro	Gln
			20					25				30			
Lys	Tyr	Gln	Leu	Leu	Val	Tyr	His	Ala	Asp	Ser	Leu	Phe	His	Asp	Lys
		35				40					45				
Glu	Tyr	Arg	Asn	Ala	Val	Ser	Lys	Tyr	Thr	Met	Ala	Leu	Gln	Gln	Lys
	50				55				60						
Lys	Ala	Leu	Ser	Lys	Thr	Ser	Lys	Val	Arg	Pro	Ser	Thr	Gly	Asn	Ser

65					70					75					80
Ala	Ser	Thr	Pro	Gln	Ser	Gln	Cys	Leu	Pro	Ser	Glu	Ile	Glu	Val	Lys
				85					90					95	
Tyr	Lys	Met	Ala	Glu	Cys	Tyr	Thr	Met	Leu	Lys	Gln	Asp	Lys	Asp	Ala
			100					105					110		
Ile	Ala	Ile	Leu	Asp	Gly	Ile	Pro	Ser	Arg	Gln	Arg	Thr	Pro	Lys	Ile
		115				120					125				
Asn	Met	Met	Leu	Ala	Asn	Leu	Tyr	Lys	Lys	Ala	Gly	Gln	Glu	Arg	Pro
		130				135					140				
Ser	Val	Thr	Ser	Tyr	Lys	Glu	Val	Leu	Arg	Gln	Cys	Pro	Leu	Ala	Leu
		145			150					155				160	
Asp	Ala	Ile	Leu	Gly	Leu	Leu	Ser	Leu	Ser	Val	Lys	Gly	Ala	Glu	Val
			165						170					175	
Ala	Ser	Met	Thr	Met	Asn	Val	Ile	Gln	Thr	Val	Pro	Asn	Leu	Asp	Trp
			180					185						190	
Leu	Ser	Val	Trp	Ile	Lys	Ala	Tyr	Ala	Phe	Val	His	Thr	Gly	Asp	Asn
		195				200					205				
Ser	Arg	Ala	Ile	Ser	Thr	Ile	Cys	Ser	Leu	Glu	Lys	Lys	Ser	Leu	Leu
		210				215					220				
Arg	Asp	Asn	Val	Asp	Leu	Leu	Gly	Ser	Leu	Ala	Asp	Leu	Tyr	Phe	Arg
		225			230					235				240	
Ala	Gly	Asp	Asn	Lys	Asn	Ser	Val	Leu	Lys	Phe	Glu	Gln	Ala	Gln	Met
			245						250					255	
Leu	Asp	Pro	Tyr	Leu	Ile	Lys	Gly	Met	Asp	Val	Tyr	Gly	Tyr	Leu	Leu
		260						265					270		
Ala	Arg	Glu	Gly	Arg	Leu	Glu	Asp	Val	Glu	Asn	Leu	Gly	Cys	Arg	Leu
		275				280					285				
Phe	Asn	Ile	Ser	Asp	Gln	His	Ala	Glu	Pro	Trp	Val	Val	Ser	Gly	Cys
		290				295					300				
His	Ser	Phe	Tyr	Ser	Lys	Arg	Tyr	Ser	Arg	Ala	Leu	Tyr	Leu	Gly	Ala
		305			310					315				320	
Lys	Ala	Ile	Gln	Leu	Asn	Ser	Asn	Ser	Val	Gln	Ala	Leu	Leu	Leu	Lys
			325						330					335	
Gly	Ala	Ala	Leu	Arg	Asn	Met	Gly	Arg	Val	Gln	Glu	Ala	Ile	Ile	His
		340					345						350		
Phe	Arg	Glu	Ala	Ile	Arg	Leu	Ala	Pro	Cys	Arg	Leu	Asp	Cys	Tyr	Glu
		355				360					365				
Gly	Leu	Ile	Glu	Cys	Tyr	Leu	Ala	Ser	Asn	Ser	Ile	Arg	Glu	Ala	Met
		370				375					380				
Val	Met	Ala	Asn	Asn	Val	Tyr	Lys	Thr	Leu	Gly	Ala	Asn	Ala	Gln	Thr
		385			390					395				400	
Leu	Thr	Leu	Leu	Ala	Thr	Val	Cys	Leu	Glu	Asp	Pro	Val	Thr	Gln	Glu
			405						410					415	
Lys	Ala	Lys	Thr	Leu	Leu	Asp	Lys	Ala	Leu	Thr	Gln	Arg	Pro	Asp	Tyr
			420				425						430		
Ile	Lys	Ala	Val	Val	Lys	Lys	Ala	Glu	Leu	Leu	Ser	Arg	Glu	Gln	Lys
		435					440					445			
Tyr	Glu	Asp	Gly	Ile	Ala	Leu	Leu	Arg	Asn	Ala	Leu	Ala	Asn	Gln	Ser
		450				455					460				
Asp	Cys	Val	Leu	His	Arg	Ile	Leu	Gly	Asp	Phe	Leu	Val	Ala	Val	Asn
		465			470					475				480	
Glu	Tyr	Gln	Glu	Ala	Met	Asp	Gln	Tyr	Ser	Ile	Ala	Leu	Ser	Leu	Asp
			485						490					495	
Pro	Asn	Asp	Gln	Lys	Ser	Leu	Glu	Gly	Met	Gln	Lys	Met	Glu	Lys	Glu

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          500          505          510
Glu Ser Pro Thr Asp Ala Thr Gln Glu Glu Asp Val Asp Asp Met Glu
          515          520          525
Gly Ser Gly Glu Glu Gly Asp Leu Glu Gly Ser Asp Ser Glu Ala Ala
          530          535          540
Gln Trp Ala Asp Gln Glu Gln Trp Phe Gly Met Ser Glu Gly Ala Ala
545          550          555          560
Ala Pro Trp Pro Gln Trp Pro Ala Leu Leu
          565          570

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<210> 5425
 <211> 639
 <212> DNA
 <213> Homo sapiens

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<400> 5425
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120
ttctctccc acccgccctc tcccaggtgg gagacattgt ctcggtgac gacatgccac
180
ccacagagga tcggagctgg tggcggggca agcgaggctt ccaggctcggg ttcttcccc
240
gtgagtgtgt ggaactcttc acagagcggc caggctccggg cctgaaggcg gatgccgatg
300
gcccccatg tggcaccg gctccccagg gtatctcgtc tctgacctca gctgtgccac
360
ggcctcgtgg gaagctggcc ggctgctcc gcacctcat gcgctccgc cttctcggc
420
agcggctgcg gcagcgggga atcctgcgac agagggtgtt tggctgcgat cttggcgagc
480
acctcagcaa ctcaggccag gatgtgcccc gtgctgcgct gctgctccga gttcattgag
540
gccnacgggg tgggtggatg gatctaccgg ctctcaggcg tgtcttccaa catccagagg
600
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639

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<210> 5426
 <211> 98
 <212> PRT
 <213> Homo sapiens

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<400> 5426
Pro Gln Leu Cys His Gly Leu Val Gly Ser Trp Pro Ala Cys Ser Ala
1          5          10          15
Pro Ser Cys Ala Pro Ala Leu Leu Gly Ser Gly Cys Gly Ser Gly Glu
20          25          30
Ser Cys Asp Arg Gly Cys Leu Ala Ala Ile Leu Ala Ser Thr Ser Ala
35          40          45
Thr Gln Ala Arg Met Cys Pro Val Leu Arg Cys Cys Ser Glu Phe Ile
50          55          60
Glu Ala Xaa Gly Val Val Asp Gly Ile Tyr Arg Leu Ser Gly Val Ser

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```

65          70          75          80
Ser Asn Ile Gln Arg Leu Arg His Glu Phe Asp Ser Glu Arg Ile Pro
          85          90          95
Glu Leu

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<210> 5427
<211> 366
<212> DNA
<213> Homo sapiens
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<400> 5427
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120
tgaggatata tcagagggga aaatggatac agatactctg aaaaaacgtg cattctagct
180
gggattgggt cctccacact gtgtccaaaa ggatatgttg ggttgctgaa gtagataaac
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tggattggc agcaggaaca gcatttatgg aacagagggg aagacacatt caaggaatga
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360
gttgaa
366
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<210> 5428
<211> 101
<212> PRT
<213> Homo sapiens
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<400> 5428
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 1                    5                10                15
Ser Cys Cys Gln Tyr Gln Phe Ile Tyr Phe Ser Asn Pro Asn Ile Pro
 20                25                30
Phe Gly His Ser Val Glu Asp Pro Ile Pro Ala Arg Met His Val Phe
 35                40                45
Ser Glu Tyr Leu Tyr Pro Phe Cys Pro Leu Met Tyr Pro Gln His Leu
 50                55                60
Glu Glu His Leu Ala Cys Ser Arg Tyr Ser Thr Arg Ile Phe Asp Leu
 65                70                75                80
Phe Val Gly Leu Phe Met Thr Glu Ser Cys Ser Val Ala Gln Thr Gly
 85                90                95
Val Gln Tyr Ser Asp
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<210> 5429
<211> 612
<212> DNA
<213> Homo sapiens
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<400> 5429

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360
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420
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540
cgaaagaagc ccctgccctg gctggggggc acctgtgccc caccgcagcc ttcaggcagc
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1680
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1740
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<210> 5432

<211> 863

<212> PRT

<213> Homo sapiens

<400> 5432

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Glu	Tyr	Leu	Leu	Arg	His	Leu	Ala	Arg	Met	Ala	Arg	His	Ser	Ala	Asn
		20					25					30			
Thr	Ser	Met	His	Ala	Arg	Asn	Leu	Ala	Ile	Val	Trp	Ala	Pro	Asn	Leu

[illegible]

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          485          490          495
Gly Gly Thr Pro Pro Ala Ser Gln Ser Pro Phe His Arg Ser Leu Ser
          500          505          510
Leu Glu Val Gly Gly Glu Pro Leu Gly Thr Ser Gly Ser Gly Pro Pro
          515          520          525
Pro Asn Ser Leu Ala His Pro Gly Ala Trp Val Pro Gly Pro Pro Pro
          530          535          540
Tyr Leu Pro Arg Gln Gln Ser Asp Gly Ser Leu Leu Arg Ser Gln Arg
545          550          555          560
Pro Met Gly Thr Ser Arg Arg Gly Leu Arg Gly Pro Ala Gln Val Ser
          565          570          575
Ala Gln Leu Arg Ala Gly Gly Gly Gly Arg Asp Ala Pro Glu Ala Ala
          580          585          590
Ala Gln Ser Pro Cys Ser Val Pro Ser Gln Val Pro Thr Pro Gly Phe
          595          600          605
Phe Ser Pro Ala Pro Arg Glu Cys Leu Pro Pro Phe Leu Gly Val Pro
          610          615          620
Lys Pro Gly Leu Tyr Pro Leu Gly Pro Pro Ser Phe Gln Pro Ser Ser
625          630          635          640
Pro Ala Pro Val Trp Arg Ser Ser Leu Gly Pro Pro Ala Pro Leu Asp
          645          650          655
Arg Gly Glu Asn Leu Tyr Tyr Glu Ile Gly Ala Ser Glu Gly Ser Pro
          660          665          670
Tyr Ser Gly Pro Thr Arg Ser Trp Ser Pro Phe Arg Ser Met Pro Pro
          675          680          685
Asp Arg Leu Asn Ala Ser Tyr Gly Met Leu Gly Gln Ser Pro Pro Leu
          690          695          700
His Arg Ser Pro Asp Phe Leu Leu Ser Tyr Pro Pro Ala Pro Ser Cys
705          710          715          720
Phe Pro Pro Asp His Leu Gly Tyr Ser Ala Pro Gln His Pro Ala Arg
          725          730          735
Arg Pro Thr Pro Pro Glu Pro Leu Tyr Val Asn Leu Ala Leu Gly Pro
          740          745          750
Arg Gly Pro Ser Pro Ala Ser Ser Ser Ser Ser Pro Pro Ala His
          755          760          765
Pro Arg Ser Arg Ser Asp Pro Gly Pro Pro Val Pro Arg Leu Pro Gln
          770          775          780
Lys Gln Arg Ala Pro Trp Gly Pro Arg Thr Pro His Arg Val Pro Gly
785          790          795          800
Pro Trp Gly Pro Pro Glu Pro Leu Leu Leu Tyr Arg Ala Ala Pro Pro
          805          810          815
Ala Tyr Gly Arg Gly Gly Glu Leu His Arg Gly Ser Leu Tyr Arg Asn
          820          825          830
Gly Gly Gln Arg Gly Glu Gly Ala Gly Pro Pro Pro Pro Tyr Pro Thr
          835          840          845
Pro Ser Trp Ser Leu His Ser Glu Gly Gln Thr Arg Ser Tyr Cys
          850          855          860

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<210> 5433

<211> 385

<212> DNA

<213> Homo sapiens

<400> 5433

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 180
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 385

<210> 5434

<211> 128

<212> PRT

<213> Homo sapiens

<400> 5434

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 Thr Val Leu Ser Ser Ser Leu Asn Asn His Pro Gln Thr Ser Val Pro
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 Asn Ala Ser Ala Leu His Pro Ser Leu Arg Leu Phe Ser Leu Ser Asn
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<212> DNA

<213> Homo sapiens

<400> 5435

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<211> 4234

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<210> 5443

<211> 2021

<212> DNA

<213> Homo sapiens

<400> 5443

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 2021

<210> 5444

<211> 438

<212> PRT

<213> Homo sapiens

<400> 5444

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			20					25						30	
Lys	Ile	Arg	Leu	Arg	Cys	Gln	Lys	Gly	Ile	Pro	Pro	Ser	Leu	Arg	Gly
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Arg	Ala	Trp	Gln	Tyr	Leu	Ser	Gly	Gly	Lys	Val	Lys	Leu	Gln	Gln	Asn
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Pro	Gly	Lys	Phe	Asp	Glu	Leu	Asp	Met	Ser	Pro	Gly	Asp	Pro	Lys	Trp
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<210> 5445
<211> 1187
<212> DNA
<213> Homo sapiens
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 420
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<210> 5446

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5446

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Glu	Ser	Lys	His	Thr	Thr	Cys	Ala	Lys	Val	Lys	Trp	Pro	Gln	Pro	Pro
			20					25					30		
Arg	Lys	Thr	Gly	Trp	Arg	Phe	Leu	Arg	Arg	Ser	Thr	His	Ser	Arg	His
		35					40					45			
Gly	Thr	Gln	Trp	Phe	His	Pro	Gln	Val	Cys	Ser	Asn	Arg	His	His	Ser
	50				55					60					
Pro	Arg	Pro	His	Ala	Asp	Ser	Asp	Thr	Arg	Ala	His	Ser	Pro	Arg	Ser

65		70		75		80									
His	Ala	Asp	Ser	Asp	Met	Arg	Ala	His	Ser	Leu	Ser	His	Asp	Ser	Gln
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Thr	Val	Glu	Thr	Arg	Gln	Val	Gly	Leu	Gly	Cys					
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<210> 5447

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5447

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1260

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<210> 5448
 <211> 189
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 <213> Homo sapiens

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 Ala Leu His Ser Ala Leu Gly Gly Thr Lys Lys Lys Lys Lys Thr Ile
 35 40 45
 Val Thr Asp Val Phe Gln Gly Ser Met Arg Ile Phe Thr Lys Lys Leu
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 Pro His Pro Asp Leu Pro Ala Glu Glu Lys Glu Gln Leu Leu His Asn
 65 70 75 80
 Asp Glu Tyr Gln Glu Thr Met Val Glu Ser Thr Phe Met Tyr Leu Thr
 85 90 95
 Leu Asp Leu Pro Thr Ala Pro Leu Tyr Lys Asp Glu Lys Glu Gln Leu
 100 105 110
 Ile Ile Pro Gln Val Pro Leu Phe Asn Ile Leu Ala Lys Phe Asn Gly
 115 120 125
 Ile Thr Glu Lys Glu Tyr Lys Thr Tyr Lys Glu Asn Phe Leu Lys Arg
 130 135 140
 Phe Gln Leu Thr Lys Leu Pro Pro Tyr Leu Ile Phe Cys Ile Lys Arg
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<210> 5449
 <211> 1359
 <212> DNA
 <213> Homo sapiens

<400> 5449
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<211> 293

<212> PRT

<213> Homo sapiens

<400> 5450

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			20				25						30		
Ile	Thr	Gln	Glu	Arg	Ile	Val	Phe	Leu	Asp	Thr	Gln	Pro	Ile	Leu	Ser
			35				40					45			
Pro	Ser	Ile	Leu	Asp	His	Leu	Ile	Asn	Asn	Asp	Arg	Lys	Leu	Pro	Pro
			50			55					60				
Glu	Tyr	Asn	Leu	Pro	His	Thr	Tyr	Val	Glu	Met	Gln	Ser	Leu	Gln	Ile

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 85 90 95
 Trp Phe Thr Asp Leu Ser Leu Tyr Arg Phe Leu Gln Thr Ala Glu Met
 100 105 110
 Val Lys Pro Ser Thr Pro Ser Pro Ser His Glu Ser Ser Ser Ser Ser
 115 120 125
 Gly Ser Asp Glu Gly Thr Glu Tyr Tyr Pro His Leu Val Phe Phe Gln
 130 135 140
 Asn Lys Ala Arg Arg Glu Asp Phe Cys Pro Arg Lys Leu Arg Gln Met
 145 150 155 160
 His Leu Met Ile Asp Gln Leu Met Ala His Ser His Leu Arg Tyr Lys
 165 170 175
 Gly Thr Leu Ser Met Leu Gln Cys Asn Val Phe Pro Gly Leu Pro Pro
 180 185 190
 Asp Phe Leu Asp Ser Glu Val Asn Leu Phe Leu Val Pro Phe Met Asp
 195 200 205
 Ser Glu Ala Glu Ser Glu Asn Pro Pro Arg Ala Gly Pro Gly Ser Ser
 210 215 220
 Pro Leu Phe Ser Leu Leu Pro Gly Tyr Arg Gly His Pro Ser Phe Gln
 225 230 235 240
 Ser Leu Val Ser Lys Leu Arg Ser Gln Val Met Ser Met Ala Arg Pro
 245 250 255
 Gln Leu Ser His Thr Ile Leu Thr Glu Lys Asn Trp Phe His Tyr Ala
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 Ala Arg Ile Trp Asp Gly Val Arg Lys Ser Ser Ala Leu Ala Glu Tyr
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<210> 5451

<211> 1184

<212> DNA

<213> Homo sapiens

<400> 5451

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<212> PRT

<213> Homo sapiens

<400> 5452

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			20					25					30		
Ser	Ser	Pro	Glu	Leu	Ser	Val	Ala	Phe	His	His	Ser	Gly	Pro	Ser	Cys
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Leu	Ser	Pro	Ala	Leu	Ser	Gln	Thr	Thr	Gln	Lys	Ser	Gly	His	Leu	Trp
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Gly	Phe	Cys	Gln	Lys	Ile	Glu	Gln	Val	Gln	Leu	Thr	His	Cys	Tyr	Cys
			85					90					95		
Arg	Ser	Leu	Lys	Leu	Pro	Gly	Leu	Val	Leu	Asp	Pro	Ser	Arg	Asn	His
		100					105						110		
Gln	Val	Arg	His	Leu	Glu	Pro	Pro	Gly	Glu	Gly	Pro	Pro	Ser	Arg	Ala
	115					120						125			
Leu	Lys	Glu	Leu	His	Glu	Ile	Arg	Asn	Cys	Leu	Met	Lys	Cys	Ile	Ser
	130				135						140				
Leu	Tyr	Leu	Glu	Asp	Glu	Ala	Gln	Thr	Pro	Thr	Pro	Leu	Ser	Pro	Pro
145				150					155					160	
Gly	Leu	Gly	Met	Ser	Pro	Ala	Ala	Arg	Pro	Arg	Ser	Phe	Pro	Gly	Gly
			165					170					175		
Leu	Gly	Glu	Val	Gly	Ala	Gly	Thr	Ile	Ser	Val	Pro	Ser	Thr	Leu	Thr
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<210> 5453
<211> 1974
<212> DNA
<213> Homo sapiens

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 tgagctcagt gtggtgtttg gtgcacaggg gttggtcagg ggccatggcc aaggccctgc
 1680
 cacgcacgcc catccctcag atccactgtg agcaccaacc tgctgcagtc tcttgggccc
 1740
 ctgtggcag ctctgccacg tcaccgctg cctggctccc acacagccat gcattgtcac
 1800
 tctgcctccg ggacccacg tgggagctg tgggtctgcc aggtcccacc tcctctgtcc
 1860
 cccatgccac aacctgggct cctggctaca gcagggtccc agggactcca aataaatggt
 1920
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 1974

<210> 5454

<211> 320

<212> PRT

<213> Homo sapiens

<400> 5454

Xaa	Gly	Arg	Pro	Ala	Met	Glu	Pro	Gly	Ser	Val	Glu	Asn	Leu	Ser	Ile
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Val	Tyr	Arg	Ser	Arg	Asp	Phe	Leu	Val	Val	Asn	Lys	His	Trp	Asp	Val
			20				25						30		
Arg	Ile	Asp	Ser	Lys	Ala	Trp	Arg	Glu	Thr	Leu	Thr	Leu	Gln	Lys	Gln
			35				40						45		
Leu	Arg	Tyr	Arg	Phe	Pro	Glu	Leu	Ala	Asp	Pro	Asp	Thr	Cys	Tyr	Gly
			50				55				60				
Phe	Arg	Phe	Cys	His	Gln	Leu	Asp	Phe	Ser	Thr	Ser	Gly	Ala	Leu	Cys
65					70					75				80	
Val	Ala	Leu	Asn	Lys	Ala	Ala	Ala	Gly	Ser	Ala	Tyr	Arg	Cys	Phe	Lys
			85							90				95	
Glu	Arg	Arg	Val	Thr	Lys	Ala	Tyr	Leu	Ala	Leu	Leu	Arg	Gly	His	Ile
			100					105					110		
Gln	Glu	Ser	Arg	Val	Thr	Ile	Ser	His	Ala	Ile	Gly	Arg	Asn	Ser	Thr
			115					120					125		
Glu	Gly	Arg	Ala	His	Thr	Met	Cys	Ile	Glu	Gly	Ser	Gln	Gly	Val	Ala
			130				135					140			
Gly	Cys	Glu	Asn	Pro	Lys	Pro	Ser	Leu	Thr	Asp	Leu	Val	Val	Leu	Glu
145					150					155				160	
His	Gly	Leu	Tyr	Ala	Gly	Asp	Pro	Val	Ser	Lys	Val	Leu	Leu	Lys	Pro
			165							170				175	
Leu	Thr	Gly	Arg	Thr	His	Gln	Leu	Arg	Val	His	Cys	Ser	Ala	Leu	Gly
			180					185					190		
His	Pro	Val	Val	Gly	Asp	Leu	Thr	Tyr	Gly	Glu	Val	Ser	Gly	Arg	Glu
			195				200					205			
Asp	Arg	Pro	Phe	Arg	Met	Met	Leu	His	Ala	Phe	Tyr	Leu	Arg	Ile	Pro

210	215	220
Thr Asp Thr Glu Cys Val Glu Val Cys Thr Pro Asp Pro Phe Leu Pro		
225	230	235
Ser Leu Asp Ala Cys Trp Ser Pro His Thr Leu Leu Gln Ser Leu Asp		240
	245	250
Gln Leu Val Gln Ala Leu Arg Ala Thr Pro Asp Pro Asp Pro Glu Asp		255
	260	265
Arg Gly Pro Arg Pro Gly Ser Pro Ser Ala Leu Leu Pro Gly Pro Gly		270
	275	280
Arg Pro Pro Pro Pro Pro Thr Lys Pro Pro Glu Thr Glu Ala Gln Arg		285
	290	295
Gly Pro Cys Leu Gln Trp Leu Ser Glu Trp Thr Leu Glu Pro Asp Ser		300
305	310	315
		320

<210> 5455
 <211> 975
 <212> DNA
 <213> Homo sapiens

<400> 5455
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 120
 tgagcctaag gtaccacagt tagtctcatt tgctcttgt cctgtgaact ccacttagaa
 180
 tgtcattgaa cttgggcaga cataattcta gtgtctgttc caaacgcact gtgtcacaga
 240
 agctagaatt accattagag gcacaaaccc ctgagaatac acaagggggc acgcttcag
 300
 tagatgtgtt ggggaaggag gagggcagag gggacagggg acaggattca gctttgtggt
 360
 gggctcctgag ggttcctacc aggggtagcc aggatctggg aaacagatca gcgactctag
 420
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 480
 aatagccacc ttccaggcgt gagtcttgga gataaaaatg gattttaacc taggactgcc
 540
 gggagctggc cctccgcggc tgctcagact agggctgtgt gtgctggctc tcgctgttt
 600
 ccggtgtcta actggcttgt ttctctttat ggcttggtt cattccgacc tggggtgagg
 660
 ccacatccaa cccactgccc actggctgtc cgtctggcct gccccgcggg tccaaccaca
 720
 gtggtgaagc agcgcttgca gatgtacaac tcgcagcacc ggtcagcaat cagctgcac
 780
 cggacgggtg ggaggaccga ggggttgagg gccttctacc ggagctacac cacgcagctg
 840
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 960
 gccctcgccg cggcg
 975

<210> 5456
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 5456
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 20 25 30
 Leu Tyr Gly Leu Ala Ser Phe Arg Pro Gly Val Gly Pro His Pro Thr
 35 40 45
 His Cys Pro Leu Ala Val Arg Leu Ala Cys Pro Ala Val Pro Thr Thr
 50 55 60
 Val Val Lys Gln Arg Leu Gln Met Tyr Asn Ser Gln His Arg Ser Ala
 65 70 75 80
 Ile Ser Cys Ile Arg Thr Val Trp Arg Thr Glu Gly Leu Gly Ala Phe
 85 90 95
 Tyr Arg Ser Tyr Thr Thr Gln Leu Thr Met Asn Ile Pro Phe Gln Ser
 100 105 110
 Ile His Phe Ile Thr Tyr Glu Phe Leu Gln Glu Gln Val Asn Pro His
 115 120 125
 Arg Thr Tyr Asn Pro Gln Ser His Ile Ile Ser Gly Gly Leu Ala Gly
 130 135 140
 Ala Leu Ala Ala Ala
 145

<210> 5457
 <211> 448
 <212> DNA
 <213> Homo sapiens

<400> 5457
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 120
 tccgtgtcca cccacatgac agcaggagcg atggccggga tcctggagca ctcggtcatg
 180
 taccgggtgg actcggtgaa ggtaatgtgg actgtggagc tctgtgctgg tcactttcaa
 240
 ccctgaacct gatgctactt attttgcagt tctaagtga aagtcggcct ggtggatgct
 300
 tcccattata atattaaatt tgcttcttcg tgaggtcaca cctcacatcc ccagtgtcac
 360
 ttttaataact agtgtttttt acatgggtggg ccatgaccca ttagtggact ctgcatttaa
 420
 aaataaataa ataaataaaa gaaaaaaaa
 448

<210> 5458
 <211> 81
 <212> PRT

<213> Homo sapiens

<400> 5458

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Arg Ser Gly Ser Val Gly Ser Gln Ala Val Ala Arg Arg Met Asp Gly
 1             5             10             15
Asp Ser Arg Asp Gly Gly Gly Gly Lys Asp Ala Thr Gly Ser Glu Asp
      20             25             30
Tyr Glu Asn Leu Pro Thr Ser Ala Ser Val Ser Thr His Met Thr Ala
      35             40             45
Gly Ala Met Ala Gly Ile Leu Glu His Ser Val Met Tyr Pro Val Asp
      50             55             60
Ser Val Lys Val Met Trp Thr Val Glu Leu Cys Ala Gly His Phe Gln
65             70             75             80
Pro

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<210> 5459

<211> 1468

<212> DNA

<213> Homo sapiens

<400> 5459

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ttttgcgccc ctccccctcc ctgccacact cctgcagcct cctgcgcccc gccgagctgg
120
cggatggagc tgcgcagcgg gagcgtgggc agccaggcgg tggcgcggag gatggatggg
180
gacagccgag atggcgggcg cggaaggac gccaccgggt cggaggacta cgagaacctg
240
ccgactagcg cctccgtgtc caccacatg acagcaggag cgatggccgg gatcctggag
300
cactcggtca tgtaccgggt ggactcggtg aagacacgaa tgcagagttt gagtccagat
360
cccaaagccc agtacacaag tatctacgga gccctcaaga aaatcatgca gaccgaaggc
420
ttctggaggc ctttgcgagg cgtcaacgtc atgatcatgg gtgcagggcc agcccatgcc
480
atgtattttg cctgctatga aaacatgaaa aggactttta atgacgtttt ccaccaccaa
540
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600
ttcttcaaca cgtccctccc cagggtgttc ctccctgtga ccagccgccc tcgacttcgg
660
cccgcttgct cacgaataaa gaactcagag ttgtgtgtgc aatgcacacc cagacacacg
720
cacgcacaca cagcgcgcg cagacacatg cttttttctg ttccctccg cttttctgaag
780
cctggggaga aatcagtgac agaggtgttt tggttttatt gttatgtggg ttttcttttg
840
tatttttttt gtttgttttg tttttaaca ttcaaaagca attaatgac agacatagga
900
gaaaccctga atagaaacaa aacttttgaa tgctggattc aaaaaaaaaa aaaagttatc
960

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 1080
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 1140
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 1200
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 1260
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 1320
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 1380
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 1440
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 1468

<210> 5460

<211> 155

<212> PRT

<213> Homo sapiens

<400> 5460

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Met	Asp	Gly	Asp	Ser	Arg	Asp	Gly	Gly	Gly	Lys	Asp	Ala	Thr	Gly	
			20					25					30		
Ser	Glu	Asp	Tyr	Glu	Asn	Leu	Pro	Thr	Ser	Ala	Ser	Val	Ser	Thr	His
			35				40					45			
Met	Thr	Ala	Gly	Ala	Met	Ala	Gly	Ile	Leu	Glu	His	Ser	Val	Met	Tyr
	50					55				60					
Pro	Val	Asp	Ser	Val	Lys	Thr	Arg	Met	Gln	Ser	Leu	Ser	Pro	Asp	Pro
65					70				75					80	
Lys	Ala	Gln	Tyr	Thr	Ser	Ile	Tyr	Gly	Ala	Leu	Lys	Lys	Ile	Met	Gln
			85					90					95		
Thr	Glu	Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met
			100				105					110			
Gly	Ala	Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met
			115				120					125			
Lys	Arg	Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu
	130					135					140				
Ala	Asn	Gly	Ile	Leu	Lys	Ala	Phe	Val	Trp	Ser					
145					150					155					

<210> 5461

<211> 1725

<212> DNA

<213> Homo sapiens

<400> 5461

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120
ccgggaggca gcaacgcaag gagccaaaat agtttctttg ccggaatgct ttaattctcc
180
atatggagcg aaatattttc ctgaatatgc agagaaaatt cctggtgaat ccacacagaa
240
gctttctgaa gtagcaaagg aatgcagcat atatctcatt ggaggtaact tcctaccac
300
aaggctctat ccctgaagag gatgctggga aattatataa cacctgtgct gtgtttgggc
360
ctgatggaac ttacttagca aagtatagaa agatccatct gtttgacatt gatgttctg
420
gaaaaattac atttcaagaa tctaaaacat tgagtccggg tgatagtttc tccacatttg
480
atactcgtat gtaccagata agtttgctc tttagcaatc tcagtagaag acaatcaggc
540
atttatttct tttttgtctc tctccgattt cttcacataa cctaactgaa agaccataag
600
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660
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720
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780
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840
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900
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1020
gacatgcggt ttgcagagct tgcacaaatc tacgcacaga gaggctgcc a gctgttggt
1080
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1140
cgggctgttg ataatcagg gtatgtggcc acagcctctc ctgcccggga tgacaaagcc
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1260
gctggcacag aagaagcaat cgtgtattca gacatagacc tgaagaagct ggctgaaata
1320
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1380
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1560
atagttaaaa aggatgcagc ctggagccag agagcagaaa gctgggctgg ttctgaagct
1620
tcttccatac ttaagttgcc tccaagcagt ttgtgaaagt atcagatcct ggtatcctgg
1680

tgattgattc acctaataata aatatatttg tgccatgaac ctctt
1725

<210> 5462
<211> 159
<212> PRT
<213> Homo sapiens

<400> 5462
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20 25 30
Leu Gly Ile Cys Tyr Asp Met Arg Phe Ala Glu Leu Ala Gln Ile Tyr
35 40 45
Ala Gln Arg Gly Cys Gln Leu Leu Val Tyr Pro Gly Ala Phe Asn Leu
50 55 60
Thr Thr Gly Pro Ala His Trp Glu Leu Leu Gln Arg Ser Arg Ala Val
65 70 75 80
Asp Asn Gln Val Tyr Val Ala Thr Ala Ser Pro Ala Arg Asp Asp Lys
85 90 95
Ala Ser Tyr Val Ala Trp Gly His Ser Thr Val Val Asn Pro Trp Gly
100 105 110
Glu Val Leu Ala Lys Ala Gly Thr Glu Glu Ala Ile Val Tyr Ser Asp
115 120 125
Ile Asp Leu Lys Lys Leu Ala Glu Ile Arg Gln Gln Ile Pro Val Phe
130 135 140
Arg Gln Lys Arg Ser Asp Leu Tyr Ala Val Glu Met Lys Lys Pro
145 150 155

<210> 5463
<211> 792
<212> DNA
<213> Homo sapiens

<400> 5463
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120
gacaaaggcg agggacaaga gagagttaac atctagacag tggaaaaagc catggtgtgt
180
ggtttctggg aaccaccaac acttgcaggt ttagcttttt cccagggttg actacaagaa
240
agaaaaccat gtttttgcaa gattaaaatg tgggtgagtg tgcttaaatt aaccatcccc
300
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360
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420
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480
gggatagctg ggagtatggc caccctgtc cagatgcgg taatgaatcc agcagaagtg
540

gtgaagcagc gcttgcagat gtacaactcg cagcaccggg cagcaatcag ctgcatccgg
 600
 acggtgtgga ggaccgaggg gttggggggc ttctaccgga gctacaccac gcagctgacc
 660
 atgaacatcc ccttcagtc catccacttc atcacctatg agttcctgca ggagcaggtc
 720
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 780
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 792

<210> 5464
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 5464
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 Leu His Asp Ala Val Met Asn Pro Ala Glu Val Val Lys Gln Arg Leu
 20 25 30
 Gln Met Tyr Asn Ser Gln His Arg Ser Ala Ile Ser Cys Ile Arg Thr
 35 40 45
 Val Trp Arg Thr Glu Gly Leu Gly Ala Phe Tyr Arg Ser Tyr Thr Thr
 50 55 60
 Gln Leu Thr Met Asn Ile Pro Phe Gln Ser Ile His Phe Ile Thr Tyr
 65 70 75 80
 Glu Phe Leu Gln Glu Gln Val Asn Pro His Arg Thr Tyr Asn Pro Gln
 85 90 95
 Ser His Ile Ile Ser Gly Gly Leu Ala Gly Ala Leu Ala Ala Ala
 100 105 110

<210> 5465
 <211> 497
 <212> DNA
 <213> Homo sapiens

<400> 5465
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 aaagtccaca tgagacgcca cgggtgtctct tgccatggcc ccaccactcc agggggccagg
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 aacccccggc aggagacctc cctgacccc tctgtgcct ctctgtggg accctccagt
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 480

gcagccacgc agtgcac

497

<210> 5466

<211> 134

<212> PRT

<213> Homo sapiens

<400> 5466

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Asp Gly Gln Ala Ala Trp Val Ala Gly Pro Arg Lys Ala Gly Val Asp
      20             25             30
Val Arg Asp Glu Pro Pro Ala Lys Pro Val Gly Met Ser Gly Pro Ser
      35             40             45
Trp Trp Asp Cys Leu Gly His Arg His Gln His Gly Val Arg Ala Ile
      50             55             60
Ser Gly Asp Ile Gly Gly Ala Thr Thr Arg Trp Gly Ile Phe Asn Arg
      65             70             75             80
Leu Glu Pro Leu Arg Leu Glu Arg Pro Thr Pro Gly Arg Arg Pro Pro
      85             90             95
Leu Thr Pro Leu Leu Pro Leu Leu Trp Asp Pro Pro Val Asp Thr Pro
      100            105            110
Asp Glu Asp Thr Gln Glu Ala Ser Ser Gln Asp Arg Arg Gln Leu Pro
      115            120            125
Gly Gln Pro Arg Ser Ala
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<210> 5467

<211> 1329

<212> DNA

<213> Homo sapiens

<400> 5467

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240
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ctggactccc ctacgccagg catccaggcg gagcacagct actccctgag cggcgactca
360
gcgccccaga gcccccttgt gcccatcaag atggaggaca ccaccaaga tgcagagcat
420
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540
accacccgcg tgctgggctt cagcccttg tccaggctgc ccaccccca ccaggccccg
600

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ggagagatga ctcagctgcc agtgatcaaa gcagagcctc tggaggtgaa ccagttcctc
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 1329

<210> 5468
 <211> 363
 <212> PRT
 <213> Homo sapiens

<400> 5468
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 Asn Ala His Phe Pro Glu His Leu Asp His Phe Thr Glu Asn Met Glu
 35 40 45
 Asp Phe Ser Asn Asp Leu Phe Ser Ser Phe Phe Asp Asp Pro Val Leu
 50 55 60
 Asp Glu Lys Ser Pro Leu Leu Asp Met Glu Leu Asp Ser Pro Thr Pro
 65 70 75 80
 Gly Ile Gln Ala Glu His Ser Tyr Ser Leu Ser Gly Asp Ser Ala Pro
 85 90 95
 Gln Ser Pro Leu Val Pro Ile Lys Met Glu Asp Thr Thr Gln Asp Ala
 100 105 110
 Glu His Gly Ala Trp Ala Leu Gly His Lys Leu Cys Ser Ile Met Val
 115 120 125
 Lys Gln Glu Gln Ser Pro Glu Leu Pro Val Asp Pro Leu Ala Ala Pro
 130 135 140
 Ser Ala Met Ala Ala Ala Ala Met Ala Thr Thr Pro Leu Leu Gly
 145 150 155 160
 Leu Ser Pro Leu Ser Arg Leu Pro Ile Pro His Gln Ala Pro Gly Glu

165 170 175
 Met Thr Gln Leu Pro Val Ile Lys Ala Glu Pro Leu Glu Val Asn Gln
 180 185 190
 Phe Leu Lys Val Thr Pro Glu Asp Leu Val Gln Met Pro Pro Thr Pro
 195 200 205
 Pro Ser Ser His Gly Ser Asp Ser Asp Gly Ser Gln Ser Pro Arg Ser
 210 215 220
 Leu Pro Pro Ser Ser Pro Val Arg Pro Met Ala Arg Ser Ser Thr Ala
 225 230 235 240
 Ile Ser Ser Ser Pro Leu Leu Thr Ala Pro His Lys Leu Gln Gly Thr
 245 250 255
 Ser Gly Pro Leu Val Leu Thr Glu Glu Glu Lys Arg Thr Leu Ile Ala
 260 265 270
 Glu Gly Tyr Pro Ile Pro Thr Lys Leu Pro Leu Thr Lys Ser Glu Glu
 275 280 285
 Lys Ala Leu Lys Lys Ile Arg Arg Lys Ile Lys Asn Lys Ile Ser Ala
 290 295 300
 Gln Glu Ser Arg Arg Lys Lys Lys Glu Tyr Met Asp Ser Leu Glu Lys
 305 310 315 320
 Lys Val Glu Ser Cys Ser Thr Glu Asn Leu Glu Leu Arg Lys Lys Val
 325 330 335
 Glu Thr Leu Glu Asn Ala Asn Ser Phe Ser Ser Gly Ile Gln Pro Leu
 340 345 350
 Leu Cys Ser Leu Ile Gly Leu Glu Asn Pro Thr
 355 360

<210> 5469

<211> 1292

<212> DNA

<213> Homo sapiens

<400> 5469

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 120
 acggagtta cccaggtggt gcagcatgac acggcctgta ccacgcagc cacggccagc
 180
 gtggtcaagg agaagctggc tacggaaggc tcctcaggag caacagagaa gatgaagaaa
 240
 gggttatctg acttcttagg ggtgatctca gacaccttg ccccttcgcc agacaaaacc
 300
 atcgactgcg atgtcatcac cctgatgggc acaccgtctg gcacagctga gccctatgat
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 ggcaccaagg ctgcctcta tagcctgcag tcggaccag caacctactg taatgaacca
 420
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 480
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 540
 gttccagcag ctgtttccca ttcagaattc tggcatcggt atttctataa agtccatcag
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 ttagagcagg agcaggcccc gagggacgcc ctgaagcagc gggcggaaca gagcatctct
 660

gaagagcccg gctgggagga ggaggaagag gagctcatgg gcatttcacc catatctcca
 720
 aaagaggcaa aggttctgtt ggccaaaatt tctacattcc ctgaaggaga acctggcccc
 780
 cagagcccct gtgaagagaa tctgggtgact tcagttgagc cccagcaga ggtgactcca
 840
 tcagagagca gtgagagcat ctccctcgtg acacagatcg ccaacccggc cactgcacgt
 900
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 960
 cagggcctgg ctgtggatgt gggtgagact ggacctcac cccctattca ctccaagccc
 1020
 ctaacgcctg ctggccacac cggcgcccca gagcccaggc ctccagccag agtagagact
 1080
 ctgagggagg aggcgcccac agacttacgg gtgtttgagc tgaactcgga tagtgggaag
 1140
 tctacaccct ccaacaatgg aaagaaaggc tcaagcacgg acatcagtga ggactgggag
 1200
 aaagactttg acttggacat gactgaagag gaggtgcaga tggcactttc caaagtggat
 1260
 gcctccgggg agctgaagat gtagaggggg aa
 1292

<210> 5470

<211> 427

<212> PRT

<213> Homo sapiens

<400> 5470

Xaa	Ala	Ala	Ala	Ser	Thr	Glu	Gly	Glu	Asp	Val	Gly	Trp	Trp	Arg	Ser
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Trp	Leu	Gln	Gln	Ser	Tyr	Gln	Ala	Val	Lys	Glu	Lys	Ser	Ser	Glu	Ala
			20					25					30		
Leu	Glu	Phe	Met	Lys	Arg	Asp	Leu	Thr	Glu	Phe	Thr	Gln	Val	Val	Gln
		35				40					45				
His	Asp	Thr	Ala	Cys	Thr	Ile	Ala	Ala	Thr	Ala	Ser	Val	Val	Lys	Glu
	50				55				60						
Lys	Leu	Ala	Thr	Glu	Gly	Ser	Ser	Gly	Ala	Thr	Glu	Lys	Met	Lys	Lys
65				70				75					80		
Gly	Leu	Ser	Asp	Phe	Leu	Gly	Val	Ile	Ser	Asp	Thr	Phe	Ala	Pro	Ser
		85					90						95		
Pro	Asp	Lys	Thr	Ile	Asp	Cys	Asp	Val	Ile	Thr	Leu	Met	Gly	Thr	Pro
	100						105						110		
Ser	Gly	Thr	Ala	Glu	Pro	Tyr	Asp	Gly	Thr	Lys	Ala	Arg	Leu	Tyr	Ser
	115					120						125			
Leu	Gln	Ser	Asp	Pro	Ala	Thr	Tyr	Cys	Asn	Glu	Pro	Asp	Gly	Pro	Pro
	130					135				140					
Glu	Leu	Phe	Asp	Ala	Trp	Leu	Ser	Gln	Phe	Cys	Leu	Glu	Glu	Lys	Lys
145				150				155						160	
Gly	Glu	Ile	Ser	Glu	Leu	Leu	Val	Gly	Ser	Pro	Ser	Ile	Arg	Ala	Leu
		165					170						175		
Tyr	Thr	Lys	Met	Val	Pro	Ala	Ala	Val	Ser	His	Ser	Glu	Phe	Trp	His
	180						185						190		
Arg	Tyr	Phe	Tyr	Lys	Val	His	Gln	Leu	Glu	Gln	Glu	Gln	Ala	Arg	Arg

195 200 205
 Asp Ala Leu Lys Gln Arg Ala Glu Gln Ser Ile Ser Glu Glu Pro Gly
 210 215 220
 Trp Glu Glu Glu Glu Glu Glu Leu Met Gly Ile Ser Pro Ile Ser Pro
 225 230 235 240
 Lys Glu Ala Lys Val Pro Val Ala Lys Ile Ser Thr Phe Pro Glu Gly
 245 250 255
 Glu Pro Gly Pro Gln Ser Pro Cys Glu Glu Asn Leu Val Thr Ser Val
 260 265 270
 Glu Pro Pro Ala Glu Val Thr Pro Ser Glu Ser Ser Glu Ser Ile Ser
 275 280 285
 Leu Val Thr Gln Ile Ala Asn Pro Ala Thr Ala Pro Glu Ala Arg Val
 290 295 300
 Leu Pro Lys Asp Leu Ser Gln Lys Leu Leu Glu Ala Ser Leu Glu Glu
 305 310 315 320
 Gln Gly Leu Ala Val Asp Val Gly Glu Thr Gly Pro Ser Pro Pro Ile
 325 330 335
 His Ser Lys Pro Leu Thr Pro Ala Gly His Thr Gly Gly Pro Glu Pro
 340 345 350
 Arg Pro Pro Ala Arg Val Glu Thr Leu Arg Glu Glu Ala Pro Thr Asp
 355 360 365
 Leu Arg Val Phe Glu Leu Asn Ser Asp Ser Gly Lys Ser Thr Pro Ser
 370 375 380
 Asn Asn Gly Lys Lys Gly Ser Ser Thr Asp Ile Ser Glu Asp Trp Glu
 385 390 395 400
 Lys Asp Phe Asp Leu Asp Met Thr Glu Glu Glu Val Gln Met Ala Leu
 405 410 415
 Ser Lys Val Asp Ala Ser Gly Glu Leu Lys Met
 420 425

<210> 5471
 <211> 534
 <212> DNA
 <213> Homo sapiens

<400> 5471
 cggccgcccc gcgggggcgc agaaatagga ccgtcctggc agaggctgca gccgacccag
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 ctggccccac tacgcggggc ccagagccag ggtgggggat gcagagaccg ggcgtgcggg
 120
 ttgccagggtg tggcgacat gtgtgcccgt gggcagagta cagagacaca agcttgtgtg
 180
 gacacgaatg tgtagctatg tgcgagtgc caccgagtg tgagtgcagg gacccaggg
 240
 cggcctgcgt cggcgccag ggcataatagg ggcgtgcacg cagtcttgga ggtgtgtgca
 300
 cagagccccc ggcacccgcg tgtgtgcaaa gacacaggaa cccgtctgcg tggcgctgtg
 360
 tgtgcaaccc aaggagggtg gcgcttgga tccaaagtgt gcgcttatcc ggatgtggat
 420
 gtgggggcag cgggggacag ggctgggtgt gcgtgactcg ggtgtgccgg gaccacaga
 480
 gcatatgtgt ccattgcttg tgctgtgact catgtccctg ggggtgggcac gcgt
 534

<210> 5472
 <211> 161
 <212> PRT
 <213> Homo sapiens

<400> 5472
 Met Leu Cys Gly Ser Arg His Thr Arg Val Thr His Thr Gln Pro Cys
 1 5 10 15
 Pro Arg Leu Pro Pro His Pro His Pro Asp Lys Arg Thr Leu Trp Ser
 20 25 30
 Pro Ser Ala His Leu Leu Gly Leu His Thr Gln Arg His Ala Asp Gly
 35 40 45
 Phe Leu Cys Leu Cys Thr His Ala Gly Ala Gly Gly Ser Val His Thr
 50 55 60
 Pro Pro Arg Leu Arg Ala Arg Pro Tyr Met Pro Cys Ala Pro Thr Gln
 65 70 75 80
 Ala Gly Leu Gly Ser Leu His Ser Pro Leu Arg Val His Ser His Ile
 85 90 95
 Ala Thr His Ser Cys Pro His Lys Leu Val Ser Leu Tyr Ser Ala His
 100 105 110
 Gly His Thr Cys Ala Pro His Leu Ala Thr Arg Thr Pro Gly Leu Cys
 115 120 125
 Ile Pro His Pro Gly Ser Gly Pro Arg Val Val Gly Pro Ala Gly Ser
 130 135 140
 Ala Ala Ala Ser Ala Arg Thr Val Leu Phe Leu Arg Pro Arg Gly Ala
 145 150 155 160
 Ala

<210> 5473
 <211> 691
 <212> DNA
 <213> Homo sapiens

<400> 5473
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 60
 cgctgccgcg ccccgcgccc ccaggaggcc gcaccctgcg ccagggcccg gagacagcaa
 120
 catcttcttg ggctgcagg agacctgaca gatgccaaaa caaaggaaca gttgggatcc
 180
 aggcagcatg aggtagaatg gcaaacctac cagggtattc tgaagaagac aagagtcag
 240
 gaaaaaacca agtggctgga tatcaaagga aatcatgaaa aagatggagg agctcttatt
 300
 actggccaag gaaagcagtc ggagcaacca tacaatttgg tttggacact ttacaacatc
 360
 cactattctt tctccatcac caggaatccg gtcaataatg agttcggcta tagcttattt
 420
 gtgtggacat ctccatacac ttggtggact gatgcctggt ttgcacactc gtcacttcca
 480
 gggcactttg gaacttgagg tgggagactg gaaggataat aggaggtacc ggatttttgc
 540

ttttgatcac gacctcttta gctttgcaga ttgatcttt gggaagtggc ctgtggttct
 600
 tatcaccaat cctaaatcac tcctttatag ttgtggtgaa catgaaccac tagaaagact
 660
 tcttcactca acccacatta gattggtaac a
 691

<210> 5474

<211> 139

<212> PRT

<213> Homo sapiens

<400> 5474

Met	Lys	Lys	Met	Glu	Glu	Leu	Leu	Leu	Leu	Ala	Lys	Glu	Ser	Ser	Arg
1				5					10					15	
Ser	Asn	His	Thr	Ile	Trp	Phe	Gly	His	Phe	Thr	Thr	Ser	Thr	Ile	Leu
			20					25					30		
Ser	Pro	Ser	Pro	Gly	Ile	Arg	Ser	Ile	Met	Ser	Ser	Ala	Ile	Ala	Tyr
		35					40					45			
Leu	Cys	Gly	His	Leu	His	Thr	Leu	Gly	Gly	Leu	Met	Pro	Val	Leu	His
	50					55					60				
Thr	Arg	His	Phe	Gln	Gly	Thr	Leu	Glu	Leu	Glu	Val	Gly	Asp	Trp	Lys
65					70					75					80
Asp	Asn	Arg	Arg	Tyr	Arg	Ile	Phe	Ala	Phe	Asp	His	Asp	Leu	Phe	Ser
			85						90					95	
Phe	Ala	Asp	Leu	Ile	Phe	Gly	Lys	Trp	Pro	Val	Val	Leu	Ile	Thr	Asn
			100				105						110		
Pro	Lys	Ser	Leu	Leu	Tyr	Ser	Cys	Gly	Glu	His	Glu	Pro	Leu	Glu	Arg
		115					120					125			
Leu	Leu	His	Ser	Thr	His	Ile	Arg	Leu	Val	Thr					
	130					135									

<210> 5475

<211> 628

<212> DNA

<213> Homo sapiens

<400> 5475

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 gacaagtacg ggaagcccaa caagaggaaa ggcttcaatg aagggtctgt ggagatccag
 120
 aacaaccccc acgccagcta cagcgcccct ccgccagtga gctcctccga cagcgaggcc
 180
 cccgaggcca accccgccga cggcagtgac gctgacgagg acgatgagga ccgggggggc
 240
 atggccgtca cagcggtaac cgccacagct gccagcgaca ggatggagag cgactcagac
 300
 tcagacaaga gtacgcgaaa cagtggcctg aagaggaaga cgctgcgct aaagatgtcg
 360
 gtctcgaaac gagccgaaa ggctccagc gacctggatc aggccagcgt gtcccatcc
 420
 gaagaggaga actcggaaag ctcatctgag tcggagaaga ccagcgacca ggacttcaca
 480

cctgagaaga aagcagcggg cggggcgcca cggagggggc ctctgggggg acggaaaaaa
 540
 aagaaggcgc cgtcagcctc cgactccgac tccaaggcgc attcgacgg ggccaagcct
 600
 gagccggtgg ccatggcgcg gtcggcgt
 628

<210> 5476
 <211> 209
 <212> PRT
 <213> Homo sapiens

<400> 5476
 Gly Thr His Glu Thr Ala Phe Leu Gly Pro Lys Asp Leu Phe Pro Tyr
 1 5 10 15
 Asp Lys Cys Lys Asp Lys Tyr Gly Lys Pro Asn Lys Arg Lys Gly Phe
 20 25 30
 Asn Glu Gly Leu Trp Glu Ile Gln Asn Asn Pro His Ala Ser Tyr Ser
 35 40 45
 Ala Pro Pro Pro Val Ser Ser Ser Asp Ser Glu Ala Pro Glu Ala Asn
 50 55 60
 Pro Ala Asp Gly Ser Asp Ala Asp Glu Asp Asp Glu Asp Arg Gly Val
 65 70 75 80
 Met Ala Val Thr Ala Val Thr Ala Thr Ala Ala Ser Asp Arg Met Glu
 85 90 95
 Ser Asp Ser Asp Ser Asp Lys Ser Ser Asp Asn Ser Gly Leu Lys Arg
 100 105 110
 Lys Thr Pro Ala Leu Lys Met Ser Val Ser Lys Arg Ala Arg Lys Ala
 115 120 125
 Ser Ser Asp Leu Asp Gln Ala Ser Val Ser Pro Ser Glu Glu Glu Asn
 130 135 140
 Ser Glu Ser Ser Ser Glu Ser Glu Lys Thr Ser Asp Gln Asp Phe Thr
 145 150 155 160
 Pro Glu Lys Lys Ala Ala Val Arg Ala Pro Arg Arg Gly Pro Leu Gly
 165 170 175
 Gly Arg Lys Lys Lys Lys Ala Pro Ser Ala Ser Asp Ser Asp Ser Lys
 180 185 190
 Ala Asp Ser Asp Gly Ala Lys Pro Glu Pro Val Ala Met Ala Arg Ser
 195 200 205
 Ala

<210> 5477
 <211> 727
 <212> DNA
 <213> Homo sapiens

<400> 5477
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 ggctgggcag tccccagcc ggtttgtcca cagcccttg gggcagtga ggtgaatata
 120
 gggcccttct cactgagctc gtgaagtgcc tcagtcaagg caaggtcccc tggccatat
 180

gggccccccc gcccatgggg ttgggctggg ctttatagtg cctacgttag tctgtgtgga
 240
 gcccttgccc agcgggggag aaaaagggtgg cttctgggtcc gtctgtataa aacatggccc
 300
 ctcacatgtc ggccccccac acagctggga ggctgggctg gcctctcacc cctggcctcc
 360
 cctggacccc tggttggttc ctcaacttca ctctccgac ttagtgcccg gccgccccca
 420
 gactcatcgt cgctcagccc ataggggaagc ccaggcctgg cccccagaga gtctccttcc
 480
 gagtctctct cgaagcccat gagctgggtca ctgttgccgt cgccttcttc ctcttctct
 540
 tcctctctca actccagatc ctggcctagt agcaaatcac tctccaatac caggggcccc
 600
 ggtccttctg cgagggagtc ttcagtatcc actttgaccc cctcgcatct caggggctgc
 660
 ggggtgcttt gcttctctcg gggcatcgtg accggctcca gcccgacgcg cctccggcct
 720
 gcggccg
 727

<210> 5478
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 5478
 Ser Ala Ser Val Lys Ala Arg Ser Pro Gly Pro Tyr Gly Pro Pro Arg
 1 5 10 15
 Pro Trp Gly Trp Ala Gly Pro Tyr Ser Ala Tyr Val Ser Leu Cys Gly
 20 25 30
 Ala Pro Gly Gln Arg Gly Arg Lys Arg Trp Leu Leu Val Arg Leu Tyr
 35 40 45
 Lys Thr Trp Pro Leu Thr Cys Arg Pro Pro Thr Gln Leu Ala Gly Trp
 50 55 60
 Ala Gly Leu Ser Pro Leu Ala Ser Pro Gly Pro Leu Ala Gly Ser Ser
 65 70 75 80
 Thr Ser Leu Ser Ala Leu Ser Ala Arg Pro Pro Pro Asp Ser Ser Ser
 85 90 95
 Leu Ser Pro

<210> 5479
 <211> 1386
 <212> DNA
 <213> Homo sapiens

<400> 5479
 gccggcacca cagaccgaga agaagccact cggtctttgg ctgagaagcg gcgccaggcc
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 cgggagcagc gggagcgcga ggagcaggag cggaggctgc aggcagaaag ggacaagcga
 120
 atgcgagagg agcagctggc acgggaggcc gagggccggg cggagcggga ggcggaggcc
 180

cggaggcggg aggagcagga ggcacgagag aaggcgcagg ccgagcagga ggagcaggag
 240
 cggctgcaga agcagaaaga ggaggccgaa gctcggtcgc gggaagaggc ggagcggcag
 300
 cgtctggagc gggaaaagca cttccagcag caggagcaag agcggcaaga gcgcagaaag
 360
 cgtctggagg agatcatgaa gaggactcgg aagtcagaag tttctgaaac caagcagaag
 420
 caggacagca aggaggccaa cgccaacggt tccagcccag agcctgtgaa agctgtggag
 480
 gctcgggtccc cagggtctga gaaggaggct gtgcagaaag aggagcccat cccacaggag
 540
 cctcagtggg gtctcccaag caaggagtgt ccagcgtccc tggatgaatgg cctgcagcct
 600
 ctcccagcac accaggagaa tggcttctcc accaacggac cctctgggga caagagtctg
 660
 agccgaacac cagagacact cctgcccttt gcagaggcag aagccttcct caagaaagct
 720
 gtggtgcagt ccccgagggt cacagaagtc ctttaagagg gtttgcttg gatccgggca
 780
 cagttgtgag ggctcctctg catcacctac caggatgtct ggaggagaaa aagacagaac
 840
 aaagatggaa gtggcctggg ccctggggg tgggtcctct ctgttggttt taatctgcac
 900
 cttatagact gatgtctctt tggccggagc cagatctgcc cctcagtga ttctgtgtgt
 960
 cgcacgcgca gacatccctt ccccccata cacacatata cactcacagc ctctctggcc
 1020
 tcttcccttg gggagggggc acctgtagta tttgccttga tttgggtggg tacagtggat
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 1200
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 1260
 ggggtaccca tgccccctgc cctcgcttg aatcagtgtt actgcattct attaaatgtc
 1320
 tccagaaata aagaataatt ctgccaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1380
 aaaaaa
 1386

<210> 5480

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5480

Ala	Gly	Thr	Thr	Asp	Arg	Glu	Glu	Ala	Thr	Arg	Leu	Leu	Ala	Glu	Lys
1				5					10					15	
Arg	Arg	Gln	Ala	Arg	Glu	Gln	Arg	Glu	Arg	Glu	Glu	Gln	Glu	Arg	Arg
			20				25						30		
Leu	Gln	Ala	Glu	Arg	Asp	Lys	Arg	Met	Arg	Glu	Glu	Gln	Leu	Ala	Arg

35 40 45
 Glu Ala Glu Ala Arg Ala Glu Arg Glu Ala Glu Ala Arg Arg Arg Glu
 50 55 60
 Glu Gln Glu Ala Arg Glu Lys Ala Gln Ala Glu Gln Glu Glu Gln Glu
 65 70 75 80
 Arg Leu Gln Lys Gln Lys Glu Glu Ala Glu Ala Arg Ser Arg Glu Glu
 85 90 95
 Ala Glu Arg Gln Arg Leu Glu Arg Glu Lys His Phe Gln Gln Gln Glu
 100 105 110
 Gln Glu Arg Gln Glu Arg Arg Lys Arg Leu Glu Glu Ile Met Lys Arg
 115 120 125
 Thr Arg Lys Ser Glu Val Ser Glu Thr Lys Gln Lys Gln Asp Ser Lys
 130 135 140
 Glu Ala Asn Ala Asn Gly Ser Ser Pro Glu Pro Val Lys Ala Val Glu
 145 150 155 160
 Ala Arg Ser Pro Gly Leu Gln Lys Glu Ala Val Gln Lys Glu Glu Pro
 165 170 175
 Ile Pro Gln Glu Pro Gln Trp Ser Leu Pro Ser Lys Glu Leu Pro Ala
 180 185 190
 Ser Leu Val Asn Gly Leu Gln Pro Leu Pro Ala His Gln Glu Asn Gly
 195 200 205
 Phe Ser Thr Asn Gly Pro Ser Gly Asp Lys Ser Leu Ser Arg Thr Pro
 210 215 220
 Glu Thr Leu Leu Pro Phe Ala Glu Ala Glu Ala Phe Leu Lys Lys Ala
 225 230 235 240
 Val Val Gln Ser Pro Gln Val Thr Glu Val Leu
 245 250

<210> 5481
 <211> 1513
 <212> DNA
 <213> Homo sapiens

<400> 5481
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 aaggcggagg gaaggccgtg gggatggcca atcaaagggg gcgactcagg tcggtgggga
 120
 ccggcagcca atcaggagag cgctcgctcc tgactcgacc ggcccacgct tcccgccagt
 180
 cccctaaccg tgaggctgcc gcgcggcggt cactgcgcgg gggtagtggg cccagtggt
 240
 gcgctctctg gccgttcctt acactttgct tcaggctcca gtgcaggggc gtagtgggat
 300
 atggccaact cgggctgcaa ggacgtcacg ggtccagatg aggagagttt tctgtacttt
 360
 gcctacggca gcaacctgct gacagagagg atccacctcc gaaacccctc ggcggcgttc
 420
 ttctgtgtgg ccgcctgca ggattttaag cttgactttg gcaattccca aggcaaaaca
 480
 agtcaaactt ggcattggagg gatagccacc atttttcaga gtcttggcga tgaattgtgg
 540
 ggagtagtat ggaaaatgaa caaaagcaat ttaaattctc tggatgagca agaaggggtt
 600

aaaagtggaa tgtatgttgt aatagaagtt aaagttgcaa ctcaagaagg aaaagaaata
 660
 acctgtcgaa gttatctgat gacaaattac gaaagtgtct ccccatcccc acagtataaa
 720
 aagattatgt gcatgggtgc aaaagaaaat gggttgccgc tggagtatca agagaagtta
 780
 aaagcaatag aaccaaata ctatacagga aaggtctcag aagaaattga agacatcatc
 840
 aaaaaggggg aaacacaaac tctttagaac ataacagaat atatctaagg gtattctatg
 900
 tgctaataa aaatattttt aacacttgag aacagggatc tgggggatct ccacgtttga
 960
 tccattttca gcagtgtctt gaaggagtat cttacttggg tgattccttg tttttagact
 1020
 ataaaaagaa actgggatag gagttagaca atttaaaagg ggtgtatgag ggcttgaaat
 1080
 atgtgacaaa tgaatgtgag tacccttctt gtgaacactg aaagctattc tcttgaattg
 1140
 atcttaagtg tctccttgcct ctggtaaaag atagatttgt agctcacttg atgatggtgc
 1200
 tgggtgaattg ctctgctctg tctgagattt ttaaaaatca gcttaatgag agtaatctgc
 1260
 agacaattga taataacatt ttgaaaattg gaaagatggg atactgtttt tagaggaata
 1320
 aacgtatttg tgggttataaa aaaaagagc aacttccttt gcactgtata cctttttgta
 1380
 ttattaggat ttataactat gtttatatgt tgcctattta ataaatcgct taaagttata
 1440
 tatcttgaat atctttccat aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
 1500
 aaaaaaaaaa aaa
 1513

<210> 5482

<211> 188

<212> PRT

<213> Homo sapiens

<400> 5482

Met	Ala	Asn	Ser	Gly	Cys	Lys	Asp	Val	Thr	Gly	Pro	Asp	Glu	Glu	Ser
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Phe	Leu	Tyr	Phe	Ala	Tyr	Gly	Ser	Asn	Leu	Leu	Thr	Glu	Arg	Ile	His
			20				25						30		
Leu	Arg	Asn	Pro	Ser	Ala	Ala	Phe	Phe	Cys	Val	Ala	Arg	Leu	Gln	Asp
		35					40					45			
Phe	Lys	Leu	Asp	Phe	Gly	Asn	Ser	Gln	Gly	Lys	Thr	Ser	Gln	Thr	Trp
	50					55					60				
His	Gly	Gly	Ile	Ala	Thr	Ile	Phe	Gln	Ser	Pro	Gly	Asp	Glu	Leu	Trp
65					70					75				80	
Gly	Val	Val	Trp	Lys	Met	Asn	Lys	Ser	Asn	Leu	Asn	Ser	Leu	Asp	Glu
				85					90					95	
Gln	Glu	Gly	Val	Lys	Ser	Gly	Met	Tyr	Val	Val	Ile	Glu	Val	Lys	Val
			100					105					110		
Ala	Thr	Gln	Glu	Gly	Lys	Glu	Ile	Thr	Cys	Arg	Ser	Tyr	Leu	Met	Thr

115	120	125
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130	135	140
Met Gly Ala Lys Glu Asn Gly Leu Pro Leu Glu Tyr Gln Glu Lys Leu		
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Lys Ala Ile Glu Pro Asn Asp Tyr Thr Gly Lys Val Ser Glu Glu Ile		
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<210> 5483

<211> 1552

<212> DNA

<213> Homo sapiens

<400> 5483

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<210> 5484

<211> 357

<212> PRT

<213> Homo sapiens

<400> 5484

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 35 40 45
 Glu Leu Arg Gly Gly Phe Asp Trp Ser Leu His Phe Gln Trp Glu Gln
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 Leu Ser Pro Glu Gln Lys Ala Arg Arg Leu Asp Pro Thr Glu Pro Ile
 65 70 75 80
 Arg Thr Pro Ile Ile Ala Gly Gly Leu Phe Val Ile Asp Lys Ala Trp
 85 90 95
 Phe Asp Tyr Leu Gly Lys Tyr Asp Met Asp Met Asp Ile Trp Gly Gly
 100 105 110
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 Pro Tyr Val Phe Pro Asp Gly Asn Ala Asn Thr Tyr Ile Lys Asn Thr
 145 150 155 160
 Lys Arg Thr Ala Glu Val Trp Met Asp Glu Tyr Lys Gln Tyr Tyr Tyr
 165 170 175
 Ala Ala Arg Pro Phe Ala Leu Glu Arg Pro Phe Gly Asn Val Glu Ser
 180 185 190
 Arg Leu Asp Leu Arg Lys Asn Leu Arg Cys Gln Ser Phe Lys Trp Tyr
 195 200 205
 Leu Glu Asn Ile Tyr Pro Glu Leu Ser Ile Pro Lys Glu Phe Ser Ile
 210 215 220
 Gln Lys Gly Asn Ile Arg Gln Arg Gln Lys Cys Leu Glu Ser Gln Arg
 225 230 235 240
 Gln Asn Asn Gln Glu Thr Pro Asn Leu Lys Leu Ser Pro Cys Ala Lys
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275		280		285	
Pro Gly Ala Pro Val Val Leu Val Leu Cys Lys Asn Gly Asp Asp Arg					
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Gln Gln Trp Thr Lys Thr Gly Ser His Ile Glu His Ile Ala Ser His					
305		310		315	
Leu Cys Leu Asp Thr Asp Met Phe Gly Asp Gly Thr Glu Asn Gly Lys					
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<210> 5485

<211> 1549

<212> DNA

<213> Homo sapiens

<400> 5485

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 1020

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<210> 5486

<211> 290

<212> PRT

<213> Homo sapiens

<400> 5486

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			20					25					30		
Arg	Ser	Arg	Ser	Arg	Ser	Phe	Ser	Arg	Ser	Ser	Arg	Ser	His	Ser	Arg
		35					40					45			
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	50					55					60				
Arg	Ser	Arg	Arg	Arg	His	Gln	Arg	Lys	Tyr	Arg	Arg	Tyr	Ser	Arg	Ser
65					70					75				80	
Tyr	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Arg	Tyr	Arg	Glu	Arg
			85					90						95	
Arg	Tyr	Gly	Phe	Thr	Arg	Arg	Tyr	Tyr	Arg	Ser	Pro	Ser	Arg	Tyr	Arg
		100						105					110		
Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Ser	Tyr	Cys	Gly
		115					120					125			
Arg	Ala	Tyr	Ala	Ile	Ala	Arg	Gly	Gln	Arg	Tyr	Tyr	Gly	Phe	Gly	Arg
	130					135					140				
Thr	Val	Tyr	Pro	Glu	Glu	His	Ser	Arg	Trp	Arg	Asp	Arg	Ser	Arg	Thr
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			165					170					175		
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		180						185					190		
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	195						200					205			
Glu	Thr	Ser	Arg	Gly	Ile	Gly	Val	Ser	Ser	Asn	Gly	Ala	Lys	Pro	Glu
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<212> DNA
<213> Homo sapiens
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1140

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<210> 5488

<211> 272

<212> PRT

<213> Homo sapiens

<400> 5488

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			20					25					30		
Gly	Phe	Trp	Arg	Pro	Leu	Arg	Gly	Val	Asn	Val	Met	Ile	Met	Gly	Ala
	35						40					45			
Gly	Pro	Ala	His	Ala	Met	Tyr	Phe	Ala	Cys	Tyr	Glu	Asn	Met	Lys	Arg
	50				55					60					
Thr	Leu	Asn	Asp	Val	Phe	His	His	Gln	Gly	Asn	Ser	His	Leu	Ala	Asn
65				70					75					80	
Gly	Ile	Ala	Gly	Ser	Met	Ala	Thr	Leu	Leu	His	Asp	Ala	Val	Met	Asn
			85					90					95		
Pro	Ala	Glu	Val	Val	Lys	Gln	Arg	Leu	Gln	Met	Tyr	Asn	Ser	Gln	His
			100					105					110		
Arg	Ser	Ala	Ile	Ser	Cys	Ile	Arg	Thr	Val	Trp	Arg	Thr	Glu	Gly	Leu
	115						120					125			
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	130					135					140				
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Asn	Pro	His	Arg	Thr	Tyr	Asn	Pro	Gln	Ser	His	Ile	Ile	Ser	Gly	Gly
			165					170					175		
Leu	Ala	Gly	Ala	Leu	Ala	Ala	Ala	Ala	Thr	Thr	Pro	Leu	Asp	Val	Cys
		180					185					190			
Lys	Thr	Leu	Leu	Asn	Thr	Gln	Glu	Asn	Val	Ala	Leu	Ser	Leu	Ala	Asn
	195					200						205			
Ile	Ser	Gly	Arg	Leu	Ser	Gly	Met	Ala	Asn	Ala	Phe	Arg	Thr	Val	Tyr

210		215		220	
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<210> 5489

<211> 1600

<212> DNA

<213> Homo sapiens

<400> 5489

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<210> 5490
 <211> 357
 <212> PRT
 <213> Homo sapiens

<400> 5490
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 35 40 45
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 Trp Leu Gln Gln Gln Gln Gly Leu Gln Thr Val Asp Ile Arg Ala Gln
 65 70 75 80
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 85 90 95
 Arg Asp Gln Gln Glu Val Ile Gln Lys Phe Gln Asp Gly Thr Leu Asn
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 130 135 140
 Val Gln Ala Arg Gly Arg Ala Arg Ala Asp Gln Ser Val Tyr Ala Phe
 145 150 155 160
 Val Ala Thr Glu Gly Ser Arg Glu Leu Lys Arg Glu Leu Ile Asn Glu
 165 170 175
 Ala Leu Glu Thr Leu Met Glu Gln Ala Val Ala Ala Val Gln Lys Met
 180 185 190
 Asp Gln Ala Glu Tyr Gln Ala Lys Ile Arg Asp Leu Gln Gln Ala Ala
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 Leu Thr Lys Arg Ala Ala Gln Ala Ala Gln Arg Glu Asn Gln Arg Gln
 210 215 220
 Gln Phe Pro Val Glu His Val Gln Leu Leu Cys Ile Asn Cys Met Val
 225 230 235 240
 Ala Val Gly His Gly Ser Asp Leu Arg Lys Val Glu Gly Thr His His
 245 250 255
 Val Asn Val Asn Pro Asn Phe Ser Asn Tyr Tyr Asn Val Ser Arg Asp

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Pro	Val	Val	Ile	Asn	Lys	Val	Phe	Lys	Asp	Trp	Lys	Pro	Gly	Gly	Val
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Ile	Ser	Cys	Arg	Asn	Cys	Gly	Glu	Val	Trp	Gly	Leu	Gln	Met	Ile	Tyr
	290				295				300						
Lys	Ser	Val	Lys	Leu	Pro	Val	Leu	Lys	Val	Arg	Ser	Met	Leu	Leu	Glu
305				310					315					320	
Thr	Pro	Gln	Gly	Arg	Ile	Gln	Ala	Lys	Lys	Trp	Ser	Arg	Val	Pro	Phe
		325						330					335		
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<210> 5491

<211> 5555

<212> DNA

<213> Homo sapiens

<400> 5491

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1020

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<210> 5494

<211> 1278

<212> PRT

<213> Homo sapiens

<400> 5494

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		20					25					30		
Ile	Ala	Tyr	Gly	Asp	Lys	Arg	Tyr	Asn	Cys	Glu	Tyr	Ser	Gly	Pro Pro
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Lys	Pro	Leu	Pro	Lys	Asp	Gly	Tyr	Asp	Leu	Val	Gln	Glu	Leu	Cys Pro
	50				55			60						
Gly	Phe	Phe	Phe	Gly	Asn	Val	Ser	Leu	Cys	Cys	Asp	Val	Arg	Gln Leu
65				70				75					80	
Gln	Thr	Leu	Lys	Asp	Asn	Leu	Gln	Leu	Pro	Leu	Gln	Phe	Leu	Ser Arg
	85					90					95			
Cys	Pro	Ser	Cys	Phe	Tyr	Asn	Leu	Leu	Asn	Leu	Phe	Cys	Glu	Leu Thr
	100					105					110			
Cys	Ser	Pro	Arg	Gln	Ser	Gln	Phe	Leu	Asn	Val	Thr	Ala	Thr	Glu Asp
	115				120						125			
Tyr	Val	Asp	Pro	Val	Thr	Asn	Gln	Thr	Lys	Thr	Asn	Val	Lys	Glu Leu
	130				135			140						
Gln	Tyr	Tyr	Val	Gly	Gln	Ser	Phe	Ala	Asn	Ala	Met	Tyr	Asn	Ala Cys

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Arg Asp Val Glu Ala Pro Ser Ser Asn Asp Lys Ala Leu Gly Leu Leu
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Cys Gly Lys Asp Ala Asp Ala Cys Asn Ala Thr Asn Trp Ile Glu Tyr
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Met Phe Asn Lys Asp Asn Gly Gln Ala Pro Phe Thr Ile Thr Pro Val
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Phe Ser Asp Phe Pro Val His Gly Met Glu Pro Met Asn Asn Ala Thr
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Lys Gly Cys Asp Glu Ser Val Asp Glu Val Thr Ala Pro Cys Ser Cys
225          230          235          240
Gln Asp Cys Ser Ile Val Cys Gly Pro Lys Pro Gln Pro Pro Pro Pro
          245          250          255
Pro Ala Pro Trp Thr Ile Leu Gly Leu Asp Ala Met Tyr Val Ile Met
          260          265          270
Trp Ile Thr Tyr Met Ala Phe Leu Leu Val Phe Phe Gly Ala Phe Phe
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Ala Val Trp Cys Tyr Arg Lys Arg Tyr Phe Val Ser Glu Tyr Thr Pro
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Ile Asp Ser Asn Ile Ala Phe Ser Val Asn Ala Ser Asp Lys Gly Glu
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Ala Ser Cys Cys Asp Pro Val Ser Ala Ala Phe Glu Gly Cys Leu Arg
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Arg Leu Phe Thr Arg Trp Gly Ser Phe Cys Val Arg Asn Pro Gly Cys
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Ser Ser Gln Ala Arg Leu Glu Lys Glu Tyr Phe Asp Gln His Phe Gly
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Pro Phe Phe Arg Thr Glu Gln Leu Ile Ile Arg Ala Pro Leu Thr Asp
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Lys His Ile Tyr Gln Pro Tyr Pro Ser Gly Ala Asp Val Pro Phe Gly
          420          425          430
Pro Pro Leu Asp Ile Gln Ile Leu His Gln Val Leu Asp Leu Gln Ile
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Ala Ile Glu Asn Ile Thr Ala Ser Tyr Asp Asn Glu Thr Val Thr Leu
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Gln Asp Ile Cys Leu Ala Pro Leu Ser Pro Tyr Asn Thr Asn Cys Thr
465          470          475          480
Ile Leu Ser Val Leu Asn Tyr Phe Gln Asn Ser His Ser Val Leu Asp
          485          490          495
His Lys Lys Gly Asp Asp Phe Phe Val Tyr Ala Asp Tyr His Thr His
          500          505          510
Phe Leu Tyr Cys Val Arg Ala Pro Ala Ser Leu Asn Asp Thr Ser Leu
          515          520          525
Leu His Asp Pro Cys Leu Gly Thr Phe Gly Gly Pro Val Phe Pro Trp
          530          535          540
Leu Val Leu Gly Gly Tyr Asp Asp Gln Asn Tyr Asn Asn Ala Thr Ala
545          550          555          560
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Leu Gln Arg Ala Gln Ala Trp Glu Lys Glu Phe Ile Asn Phe Val Lys

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 625 630 635 640
 His Ile Lys Ser Cys Arg Arg Leu Leu Val Asp Ser Lys Val Ser Leu
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 Gly Val Phe Ser Tyr Ile Gly Leu Pro Leu Thr Leu Ile Val Ile Glu
 675 680 685
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 690 695 700
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 740 745 750
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 755 760 765
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 770 775 780
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      1045      1050      1055
Lys Ala Arg Leu Ile Ala Ser Asn Val Thr Glu Thr Met Gly Ile Asn
      1060      1065      1070
Gly Ser Ala Tyr Arg Val Phe Pro Tyr Ser Val Phe Tyr Val Phe Tyr
      1075      1080      1085
Glu Gln Tyr Leu Thr Ile Ile Asp Asp Thr Ile Phe Asn Leu Gly Val
      1090      1095      1100
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Leu Trp Ser Ala Val Ile Met Cys Ala Thr Ile Ala Met Val Leu Val
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Asn Met Phe Gly Val Met Trp Leu Trp Gly Ile Ser Leu Asn Ala Val
      1140      1145      1150
Ser Leu Val Asn Leu Val Met Ser Cys Gly Ile Ser Val Glu Phe Cys
      1155      1160      1165
Ser His Ile Thr Arg Ala Phe Thr Val Ser Met Lys Gly Ser Arg Val
      1170      1175      1180
Glu Arg Ala Glu Glu Ala Leu Ala His Met Gly Ser Ser Val Phe Ser
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Gly Ile Thr Leu Thr Lys Phe Gly Gly Ile Val Val Leu Ala Phe Ala
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Lys Ser Gln Ile Phe Gln Ile Phe Tyr Phe Arg Met Tyr Leu Ala Met
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<210> 5495

<211> 2414

<212> DNA

<213> Homo sapiens

<400> 5495

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<210> 5496

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5496

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Tyr	Gln	Cys	Pro	Asp	Gln	Met	Ala	Arg	Asn	Pro	Ala	Ala	Ile	Asp	Met
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Phe	Ile	Ile	Gly	Ala	Thr	Phe	Thr	Asp	Trp	Phe	Thr	Ser	Tyr	Val	Lys
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			165						170					175	
His	Tyr	Phe	Phe	Thr	Tyr	Arg	Ile	Arg	Ile	Glu	Met	Ser	Lys	Asp	Ala
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Leu	Pro	Glu	Lys	Ala	Cys	Gln	Leu	Asp	Ser	Arg	Tyr	Trp	Arg	Ile	Thr
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Asn	Ala	Lys	Gly	Asp	Val	Glu	Glu	Val	Gln	Gly	Pro	Gly	Val	Val	Gly
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Glu	Phe	Pro	Ile	Ile	Ser	Pro	Gly	Arg	Val	Tyr	Glu	Tyr	Thr	Ser	Cys
225					230					235				240	
Thr	Thr	Phe	Ser	Thr	Thr	Ser	Gly	Tyr	Met	Glu	Gly	Tyr	Tyr	Thr	Phe
			245						250					255	
His	Phe	Leu	Tyr	Phe	Lys	Asp	Lys	Ile	Phe	Asn	Val	Ala	Ile	Pro	Arg

	260		265		270										
Phe	His	Met	Ala	Cys	Pro	Thr	Phe	Arg	Val	Ser	Ile	Ala	Arg	Leu	Glu
	275		280		285										
Met	Gly	Pro	Asp	Glu	Tyr	Glu	Glu	Met	Glu	Glu	Glu	Glu	Glu	Glu	Glu
	290		295		300										
Glu	Glu	Glu	Asp	Glu	Asp	Asp	Asp	Ser	Ala	Asp	Met	Asp	Glu	Ser	Asp
305			310		315				320						
Glu	Asp	Asp	Glu	Glu	Arg	Arg	Arg	Arg	Val	Phe	Asp	Val	Pro	Ile	
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<210> 5497

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 5497

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<210> 5498
 <211> 150
 <212> PRT
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<400> 5498
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 35 40 45
 Asn Ile Pro His Thr Leu Thr Glu Pro His Ser Val Pro Gly Trp Cys
 50 55 60
 Trp Asp Thr Leu Arg Arg His Gly Ala Gly Gln Gly His Pro Gly Met
 65 70 75 80
 Ala Arg Ser Gly Thr Gly Glu Gly Gln Arg Glu Gly Asp Ile Glu Arg
 85 90 95
 Glu Glu Asp Glu Glu Glu Gly Asn Arg Ser Arg Lys Ser Arg Asp Ser
 100 105 110
 Arg Ser Gln Val Lys Gly Leu Pro Leu His Ser Arg Glu Gln Arg Asp
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<210> 5499
 <211> 1918
 <212> DNA
 <213> Homo sapiens

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 1918

<210> 5500

<211> 426

<212> PRT

<213> Homo sapiens

<400> 5500

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1679

<210> 5504
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 5504

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 20           25           30
Leu Pro Pro Ser Cys Thr Ile Ser Gly Glu Lys Lys Pro Pro Ala Val
 35           40           45
Ser Gly Glu Ala Thr Gly Ala Asp Ala Gly Arg Leu Cys Pro Pro Pro
 50           55           60
Arg Ser Arg Ala Pro His Lys Asp Arg Thr Leu Ala Arg Ser Arg Pro
 65           70           75           80
Gln Thr Gln Gly Glu Asp Cys Ser Leu Pro Val Gly Glu Val Lys Ile
 85           90           95
Gly Lys Arg Ser Tyr Ser Pro Ala Pro Gly Lys Gln Lys Lys Pro Asn
100           105           110
Ala Met Gly Leu Ala Pro Thr Ser Ser Pro Gly Ala Pro Asn Ser Ala
115           120           125
Arg Ala Thr His Asn Pro Val Pro Cys Gly Ser Gly Arg Gly Pro Cys
130           135           140
His Leu Ala Asn Leu Leu Ser Thr Leu Ala Gln Ser Asn Gln Asn Arg
145           150           155           160
Asp His Lys Gln Gly Pro Pro Glu Val Thr Cys Gln Ile Arg Lys Lys
165           170           175
Thr Arg Thr Leu Tyr Arg Ser Asp Gln Leu Glu Glu Leu Glu Lys Ile
180           185           190
Phe Gln Glu Asp His Tyr Pro Asp Ser Asp Lys Arg Arg Glu Ile Ala
195           200           205
Gln Thr Val Gly Val Thr Pro Gln Arg Ile Met Val Lys Gly Ala Gly
210           215           220
Ser Leu Val Ala Gly Trp Ser Gly Gly Gly Pro Thr Ile Glu Thr Leu
225           230           235           240
Glu Leu Gln Ser Glu Arg Ser Ala Val Ala Trp Val Trp Phe Gln Asn
245           250           255
Arg Arg Ala Lys Trp Arg Lys Met Glu Lys Leu Asn Gly Lys Glu Ser
260           265           270
Lys Asp Asn Pro Ala Ala Pro Gly Pro Ala Ser Ser Gln Cys Ser Ser
275           280           285
Ala Ala Glu Ile Leu Pro Ala Val Pro Met Glu Pro Lys Pro Asp Pro
290           295           300
Phe Pro Gln Glu Ser Pro Leu Asp Thr Phe Pro Glu Pro Pro Met Leu
305           310           315           320
Leu Thr Ser Asp Gln Thr Leu Ala Pro Thr Gln Pro Ser Glu Gly Ala
325           330           335
Gln Arg Val Val Thr Pro Pro Leu Phe Ser Pro Pro Pro Val Arg Arg
340           345           350
Ala Asp Leu Pro Phe Pro Leu Gly Pro Val His Thr Pro Gln Leu Met
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Pro Leu Leu Met Asp Val Ala Gly Ser Asp Ser Ser His Lys Asp Gly

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<210> 5505
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 <212> DNA
 <213> Homo sapiens

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<210> 5506
 <211> 280
 <212> PRT
 <213> Homo sapiens

<400> 5506

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 35 40 45
 Arg Gln Leu Leu Leu Asn Cys Arg Leu Val Cys Ser Leu Trp Arg Asp
 50 55 60
 Leu Ile Asp Leu Val Thr Leu Trp Lys Arg Lys Cys Leu Arg Glu Gly
 65 70 75 80
 Phe Ile Thr Glu Asp Trp Asp Gln Pro Val Ala Asp Trp Lys Ile Phe
 85 90 95
 Tyr Phe Leu Arg Ser Leu His Arg Asn Leu Leu His Asn Pro Cys Ala
 100 105 110
 Glu Glu Gly Phe Glu Phe Trp Ser Leu Asp Val Asn Gly Gly Asp Glu
 115 120 125
 Trp Lys Val Glu Asp Leu Ser Arg Asp Gln Arg Lys Glu Phe Pro Asn
 130 135 140
 Asp Gln Val Lys Lys Tyr Phe Val Thr Ser Tyr Tyr Thr Cys Leu Lys
 145 150 155 160
 Ser Gln Val Val Asp Leu Lys Ala Glu Gly Tyr Trp Glu Glu Leu Leu
 165 170 175
 Asp Thr Phe Arg Pro Asp Ile Val Val Lys Asp Trp Phe Ala Ala Arg
 180 185 190
 Ala Asp Cys Gly Cys Thr Tyr Gln Leu Lys Val Gln Leu Leu Ser Ala
 195 200 205
 Asp Tyr Phe Val Leu Ala Ser Phe Glu Pro Asp Pro Ala Thr Ile Gln
 210 215 220
 Gln Lys Ser Asp Ala Lys Trp Arg Glu Val Ser His Thr Phe Ser Asn
 225 230 235 240
 Tyr Pro Pro Gly Val Arg Tyr Ile Trp Phe Gln His Gly Gly Val Asp
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 Thr His Tyr Trp Ala Gly Trp Tyr Gly Pro Arg Val Thr Asn Ser Ser
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<210> 5507

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 5507

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<210> 5508

<211> 448

<212> PRT

<213> Homo sapiens

<400> 5508

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Thr	Pro	Ser	Asp	Phe	Asp	Gln
		35		40		45
Gln	Val	Leu	Arg	Phe	Tyr	Ala
		50		55		60
Gly	Glu	Cys	Arg	Thr	Tyr	Ile
65				70		75
Val	Glu	Ile	Arg	Glu	Val	His
			85			90
Pro	Leu	Leu	Met	Asn	Arg	Gln
			100			105
Ala	Lys	Asn	Phe	Pro	Gln	Cys
			115			120
Leu	Glu	Trp	Tyr	Thr	Ala	Lys
			130			135
Ile	Leu	Gly	Arg	Thr	Phe	Phe
145				150		155
Arg	Tyr	Tyr	Lys	Glu	Lys	Phe
			165			170
Val	Ser	Lys	Arg	Glu	Pro	Pro
			180			185
Asn	Gly	Phe	Gly	Leu	Val	Glu
			195			200
Ile	Pro	Lys	Ala	Pro	Lys	Lys
			210			215
Asn	Lys	Val	Leu	Arg	Tyr	Leu
225				230		235
Asp	Lys	Asp	Arg	Arg	Phe	Val
			245			250
Ile	Ser	Ile	Phe	Glu	Pro	Pro
			260			265
Lys	Tyr	Leu	Gly	Arg	Thr	Lys
			275			280
Asn	Pro	Val	Tyr	Tyr	Gly	Pro
			290			295
Glu	Val	Phe	Gly	His	Arg	Phe
305				310		315
Leu	Lys	Tyr	Met	Glu	Ser	Asn
			325			330
Ala	Ser	Ile	Gln	Asn	His	Val
			340			345
Ala	Glu	Ser	Lys	Gln	Thr	Glu
			355			360
Ala	Leu	Ile	Asp	Thr	Ile	Gln
			370			375
Asp	Asn	Ile	Arg	Glu	Ala	Phe
385				390		395
Tyr	Val	Asp	Arg	Asp	Met	Phe
			405			410
Pro	Val	Asp	Asp	Ser	Leu	Val
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Gly	Glu	Gly	Lys	Ile	Asn	Tyr

435

440

445

<210> 5509
 <211> 818
 <212> DNA
 <213> Homo sapiens

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 480
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 720
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<210> 5510
 <211> 105
 <212> PRT
 <213> Homo sapiens

<400> 5510
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 Ala Phe Ser Gln Ile Pro Gly His Asn Leu Asn Lys Lys Thr Pro Pro
 20 25 30
 Gly Val Lys Pro Pro Glu Ser His Val Cys Gly Glu Val Gly Val Gly
 35 40 45
 Tyr Pro Ser Thr Glu Arg His Ile Arg Asp Arg Leu Gly Arg Lys Pro
 50 55 60
 Cys Glu Tyr Gln Glu Cys Arg Gln Lys Ala Tyr Thr Cys Lys Pro Cys
 65 70 75 80
 Gly Asn Ala Phe Arg Phe His His Ser Phe His Ile His Glu Arg Pro

85 90 95
 His Ser Gly Glu Asn Leu Tyr Glu Cys
 100 105

<210> 5511
 <211> 379
 <212> DNA
 <213> Homo sapiens

<400> 5511
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 120
 ctctgctgag ttgctgagag tctgtgttcc tctctccact tataggatgg gtctcatct
 180
 tcttgagctt caagcccaa ggcagagacc tggctgctcc tcatgggagc ctcagggata
 240
 atgctgaatt cctctatggc agagatggga ggagaggctc cacgctgggc ctctcagcc
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 379

<210> 5512
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 5512
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 20 25 30
 Val Ser Ala Leu Gly Leu Glu Ala Gln Glu Asp Glu Asp Pro Ser Tyr
 35 40 45
 Lys Trp Arg Glu Glu His Arg Leu Ser Ala Thr Gln Gln Ser Glu Leu
 50 55 60
 Arg Asp Val Cys Asp Tyr Ala Ile Glu Thr Met Pro Ser Phe Pro Lys
 65 70 75 80
 Glu Gly Ser Ala Asp Val Glu Pro Asn Gln Glu Ser Leu Val Ala Glu
 85 90 95
 Ala Cys Asp Thr Pro
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<210> 5513
 <211> 837
 <212> DNA
 <213> Homo sapiens

<400> 5513
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<210> 5514

<211> 248

<212> PRT

<213> Homo sapiens

<400> 5514

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			20					25					30		
Gly	Gly	Pro	Ala	Glu	Leu	Ser	Leu	Arg	Leu	Gly	Glu	Pro	Leu	Thr	Ile
		35				40					45				
Val	Ser	Glu	Asp	Gly	Asp	Trp	Trp	Thr	Val	Leu	Ser	Glu	Val	Ser	Gly
	50				55					60					
Arg	Glu	Tyr	Asn	Ile	Pro	Ser	Val	His	Val	Ala	Lys	Val	Ser	His	Gly
65				70					75					80	
Trp	Leu	Tyr	Glu	Gly	Leu	Ser	Arg	Glu	Lys	Ala	Glu	Asp	Leu	Leu	Leu
			85					90					95		
Leu	Pro	Gly	Asn	Pro	Gly	Gly	Ala	Phe	Leu	Ile	Arg	Glu	Ser	Gln	Thr
		100					105					110			
Arg	Arg	Gly	Ser	Tyr	Ser	Leu	Ser	Val	Arg	Leu	Ser	Arg	Pro	Ala	Ser
		115				120					125				
Trp	Asp	Arg	Ile	Arg	His	Tyr	Arg	Ile	His	Cys	Leu	Asp	Asn	Gly	Trp
	130				135					140					
Leu	Tyr	Ile	Ser	Pro	Arg	Leu	Thr	Phe	Pro	Ser	Leu	Gln	Ala	Leu	Val
145				150					155					160	
Asp	His	Tyr	Ser	Glu	Leu	Ala	Asp	Asp	Ile	Cys	Cys	Leu	Leu	Lys	Glu

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                165                170                175
Pro Cys Val Leu Gln Arg Ala Gly Pro Leu Pro Gly Lys Asp Ile Pro
                180                185                190
Leu Pro Val Thr Val Gln Arg Thr Pro Leu Asn Trp Lys Glu Leu Asp
                195                200                205
Ser Ser Leu Leu Phe Ser Glu Ala Ala Thr Gly Glu Glu Ser Leu Leu
                210                215                220
Ser Glu Gly Leu Arg Glu Ser Leu Ser Phe Tyr Ile Ser Leu Asn Asp
225                230                235                240
Glu Ala Val Ser Leu Asp Asp Ala
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<210> 5515
 <211> 420
 <212> DNA
 <213> Homo sapiens

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<400> 5515
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120
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180
gagcgtggca agaacaagca ggtggtcctg atgctggta aagagtgcaa gcagctctca
240
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300
ctttgtcacc agcacctgct tcatagtctc tctggagtgc caggaacggg tcatatagat
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420

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<210> 5516
 <211> 120
 <212> PRT
 <213> Homo sapiens

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<400> 5516
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                20                25                30
Arg Gln Lys Lys Leu Glu Met Glu Lys Leu Gln Leu Gln Ala Leu Glu
                35                40                45
Gln Glu His Lys Lys Leu Ala Ala Arg Leu Glu Glu Glu Arg Gly Lys
                50                55                60
Asn Lys Gln Val Val Leu Met Leu Val Lys Glu Cys Lys Gln Leu Ser
65                70                75                80
Ser Lys Val Ile Glu Glu Ala Gln Lys Leu Glu Asp Val Met Ala Lys
                85                90                95
Leu Ala Ser Ser Leu Cys His Gln His Leu Leu His Ser Leu Ser Gly
                100                105                110
Val Pro Gly Thr Gly His Ile Asp

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115

120

<210> 5517
 <211> 804
 <212> DNA
 <213> Homo sapiens

<400> 5517
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 180
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<211> 6190

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 5524

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Asn	Trp	Thr	Gln	Arg	Ala	Ala	Arg	Tyr	Glu	Cys	Ala	Pro	Val	Lys	Pro				
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Phe	Phe	Cys	Arg	Ile	Arg	Gly	Gly	Glu	Asp	Arg	Lys	Gln	Glu	Lys	Cys				
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His	Ser	Pro	Phe	Arg	Ile	Ile	Pro	Tyr	Leu	Ile	His	Val	His	His	Pro				
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Ala	Gln	Pro	Glu	Leu	Glu	Ser	Glu	Pro	Cys	Cys	Leu	Thr	Val	Val	Glu				
				245				250						255					
Lys	Ile	His	Ser	Gly	Tyr	Glu	Ala	Pro	Arg	Ile	Pro	Val	Asn	Lys	Arg				
			260					265				270							
Ile	Phe	Thr	Thr	Thr	His	Thr	Pro	Gly	Cys	Val	Phe	Leu	Glu	Val	Asp				
	275						280					285							
Glu	Lys	Ala	Val	Pro	Leu	Leu	Gly	Tyr	Leu	Pro	Gln	Asp	Leu	Ile	Gly				
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Thr	Ser	Ile	Leu	Ser	Tyr	Leu	His	Pro	Glu	Asp	Arg	Ser	Leu	Met	Val				
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Ala	Ile	His	Gln	Lys	Gly	His	Pro	Pro	Phe	Glu	His	Ser	Pro	Ile	Arg				
			325					330						335					
Phe	Cys	Thr	Gln	Asn	Gly	Asp	Tyr	Ile	Ile	Leu	Asp	Ser	Ser	Trp	Ser				
			340					345					350						
Ser	Phe	Val	Asn	Pro	Trp	Ser	Arg	Lys	Ile	Ser	Phe	Ile	Gly	Arg					
	355						360					365							
His	Lys	Val	Arg	Thr	Ser	Pro	Leu	Asn	Glu	Asp	Val	Phe	Ala	Thr	Lys				
	370					375													

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Tyr Thr Glu Pro Cys Glu Asp Leu Arg Asn Asp Glu His Ser Pro Ser
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Tyr Gln Gln Ile Asn Cys Ile Asp Ser Val Ile Arg Tyr Leu Lys Ser
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Tyr Asn Ile Pro Ala Leu Lys Arg Lys Cys Ile Ser Cys Thr Asn Thr
545          550          555          560
Thr Ser Ser Ser Ser Glu Glu Asp Lys Gln Asn His Lys Ala Asp Asp
          565          570          575
Val Gln Ala Leu Gln Gly Asn Lys Asn Ala Pro Gln Lys Met Pro Thr
          580          585          590
Asn Gly Arg Ser Ile Asp Thr Gly Gly Gly Ala Pro Gln Ile Leu Ser
          595          600          605
Thr Ala Met Leu Ser Leu Gly Ser Gly Ile Ser Gln Cys Gly Tyr Ser
610          615          620
Ser Thr Ile Val His Val Pro Pro Glu Thr Ala Arg Asp Ala Thr
625          630          635          640
Leu Phe Cys Glu Pro Trp Thr Leu Asn Met Gln Pro Ala Pro Leu Thr
          645          650          655
Ser Glu Glu Phe Lys His Val Gly Leu Thr Ala Ala Val Leu Ser Ala
          660          665          670
His Thr Gln Lys Glu Glu Gln Asn Tyr Val Asp Lys Phe Arg Glu Lys
          675          680          685
Ile Leu Ser Ser Pro Tyr Ser Ser Tyr Leu Gln Gln Glu Ser Arg Ser
690          695          700
Lys Ala Lys Tyr Ser Tyr Phe Gln Gly Asp Ser Thr Ser Lys Gln Thr
705          710          715          720
Arg Ser Ala Gly Cys Arg Lys Gly Lys His Lys Arg Lys Lys Leu Pro
          725          730          735
Glu Pro Pro Asp Ser Ser Ser Ser Asn Thr Gly Ser Gly Pro Arg Arg
          740          745          750
Gly Ala His Gln Asn Ala Gln Pro Cys Cys Pro Ser Ala Ala Ser Ser
          755          760          765
Pro His Thr Ser Ser Pro Thr Phe Pro Pro Ala Ala Met Val Pro Ser
          770          775          780
Gln Ala Pro Tyr Leu Val Pro Ala Phe Pro Leu Pro Ala Ala Thr Ser
785          790          795          800
Pro Gly Arg Glu Tyr Ala Ala Pro Gly Thr Ala Pro Glu Gly Leu His
          805          810          815
Gly Pro Pro Leu Ser Glu Gly Leu Gln Pro Tyr Pro Ala Phe Pro Phe
          820          825          830
Pro Tyr Leu Asp Thr Phe Met Thr Val Phe Leu Pro Asp Pro Pro Val
          835          840          845
Cys Pro Leu Leu Ser Pro Ser Phe Leu Pro Cys Pro Phe Leu Gly Ala
          850          855          860
Thr Ala Ser Ser Ala Ile Ser Pro Ser Met Ser Ser Ala Met Ser Pro
865          870          875          880
Thr Leu Asp Pro Pro Ser Val Thr Ser Gln Arg Arg Glu Glu Glu
          885          890          895
Lys Trp Glu Ala Gln Ser Glu Gly His Pro Phe Ile Thr Ser Arg Ser
          900          905          910
Ser Ser Pro Leu Gln Leu Asn Leu Leu Gln Glu Glu Met Pro Arg Pro
          915          920          925
Ser Glu Ser Pro Asp Gln Met Arg Arg Asn Thr Cys Pro Gln Thr Glu
930          935          940

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Tyr Gln Cys Val Thr Gly Asn Asn Gly Ser Glu Ser Ser Pro Ala Thr
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 Thr Gly Ala Leu Ser Thr Gly Ser Pro Pro Arg Glu Asn Pro Ser His
 965 970 975
 Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys Asn Pro
 980 985 990
 Ser His Pro Thr Ala Ser Ala Leu Ser Thr Gly Ser Pro Pro Met Lys
 995 1000 1005
 Asn Pro Ser His Pro Thr Ala Ser Thr Leu Ser Met Gly Leu Pro Pro
 1010 1015 1020
 Ser Arg Thr Pro Ser His Pro Thr Ala Thr Val Leu Ser Thr Gly Ser
 1025 1030 1035 1040
 Pro Pro Ser Glu Ser Pro Ser Arg Thr Gly Ser Ala Ala Ser Gly Ser
 1045 1050 1055
 Ser Asp Ser Ser Ile Tyr Leu Thr Ser Ser Val Tyr Ser Ser Lys Ile
 1060 1065 1070
 Ser Gln Asn Gly Gln Gln Ser Gln Asp Val Gln Lys Lys Glu Thr Phe
 1075 1080 1085
 Pro Asn Val Ala Glu Glu Pro Ile Trp Arg Met Ile Arg Gln Thr Pro
 1090 1095 1100
 Glu Arg Ile Leu Met Thr Tyr Gln Val Pro Glu Arg Val Lys Glu Val
 1105 1110 1115 1120
 Val Leu Lys Glu Asp Leu Glu Lys Leu Glu Ser Met Arg Gln Gln Gln
 1125 1130 1135
 Pro Gln Phe Ser His Gly Gln Lys Glu Glu Leu Ala Lys Val Tyr Asn
 1140 1145 1150
 Trp Ile Gln Ser Gln Thr Val Thr Gln Glu Ile Asp Ile Gln Ala Cys
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<210> 5525

<211> 761

<212> DNA

<213> Homo sapiens

<400> 5525

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 360
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 420

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 660
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<210> 5526

<211> 102

<212> PRT

<213> Homo sapiens

<400> 5526

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Leu	Leu	Asp	Asp	Ala	Gln	Arg	Leu	Leu	Tyr	Arg	Asn	Val	Met	Leu	Glu
			20					25				30			
Asn	Phe	Thr	Leu	Leu	Ala	Ser	Leu	Gly	Leu	Ala	Ser	Ser	Lys	Thr	His
		35					40					45			
Glu	Ile	Thr	Gln	Leu	Glu	Ser	Trp	Glu	Glu	Pro	Phe	Met	Pro	Ala	Trp
	50					55					60				
Glu	Val	Val	Thr	Ser	Ala	Ile	Pro	Arg	Glu	Thr	Leu	Arg	Met	Ala	Phe
65					70					75				80	
Met	Arg	Glu	Leu	Ala	Ile	Glu	His	His	Ser	Ser	Lys	Tyr	Ala	His	Trp
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Arg	Gln	Asp	Glu	Asn	Ser										
			100												

<210> 5527

<211> 728

<212> DNA

<213> Homo sapiens

<400> 5527

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 420

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<210> 5528

<211> 176

<212> PRT

<213> Homo sapiens

<400> 5528

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			20					25					30		
Val	Thr	Gly	Leu	Lys	Leu	Ser	Gln	Asp	Leu	Asp	Asp	Leu	Ala	Ile	Leu
		35					40					45			
Tyr	Leu	Ala	Thr	Val	Gln	Ala	Ile	Ala	Leu	Gly	Thr	Arg	Phe	Ile	Ile
	50					55					60				
Glu	Ala	Met	Glu	Ala	Ala	Gly	His	Ser	Ile	Ser	Thr	Leu	Phe	Leu	Cys
65					70					75				80	
Gly	Gly	Leu	Ser	Lys	Asn	Pro	Leu	Phe	Val	Gln	Met	His	Ala	Asp	Ile
				85					90					95	
Thr	Gly	Met	Pro	Val	Val	Leu	Ser	Gln	Glu	Val	Glu	Ser	Val	Leu	Val
			100					105					110		
Gly	Ala	Ala	Val	Leu	Gly	Ala	Cys	Ala	Ser	Gly	Asp	Phe	Ala	Ser	Val
	115					120					125				
Gln	Glu	Ala	Met	Ala	Lys	Met	Ser	Lys	Val	Gly	Lys	Val	Val	Phe	Pro
	130					135					140				
Arg	Leu	Gln	Asp	Lys	Lys	Tyr	Tyr	Asp	Lys	Lys	Tyr	Gln	Val	Phe	Leu
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<211> 2602

<212> DNA

<213> Homo sapiens

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 120
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240
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420
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<210> 5530

<211> 603

<212> PRT

<213> Homo sapiens

<400> 5530

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 Leu Asn Leu Cys Ala Arg Arg Arg Thr Arg Val Gln Arg Pro Ile Val
 35 40 45
 Arg Leu Leu Ser Cys Pro Gly Thr Val Ala Lys Asp Leu Arg Arg Asp
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 Glu Gln Pro Ser Gly Ser Val Glu Thr Gly Phe Glu Asp Lys Ile Pro
 65 70 75 80
 Lys Arg Arg Phe Ser Glu Met Gln Asn Glu Arg Arg Glu Gln Ala Gln
 85 90 95
 Arg Thr Val Leu Ile His Cys Pro Glu Lys Ile Ser Glu Asn Lys Phe
 100 105 110
 Leu Lys Tyr Leu Ser Gln Phe Gly Pro Ile Asn Asn His Phe Phe Tyr
 115 120 125
 Glu Ser Phe Gly Leu Tyr Ala Val Val Glu Phe Cys Gln Lys Glu Ser
 130 135 140
 Ile Gly Ser Leu Gln Asn Gly Thr His Thr Pro Ser Thr Ala Met Glu

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Gln	Thr	Ser	Glu	Arg	Ser	Arg	Val	Arg	Ser	Ser	Asn	Gln	Leu	Pro	Arg																						
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Ser	Asn	Lys	Gln	Leu	Phe	Glu	Leu	Cys	Tyr	Ala	Glu	Ser	Ile	Asp																							
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Asp	Gln	Leu	Asn	Thr	Leu	Leu	Lys	Glu	Phe	Gln	Leu	Thr	Glu	Glu	Asn																						
															210											215											220
Thr	Lys	Leu	Arg	Tyr	Leu	Thr	Cys	Ser	Leu	Ile	Glu	Asp	Met	Ala	Ala																						
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Ala	Tyr	Phe	Pro	Asp	Cys	Ile	Val	Arg	Pro	Phe	Gly	Ser	Ser	Val	Asn																						
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Thr	Phe	Gly	Lys	Leu	Gly	Cys	Asp	Leu	Asp	Met	Phe	Leu	Asp	Leu	Asp																						
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Glu	Thr	Arg	Asn	Leu	Ser	Ala	His	Lys	Ile	Ser	Gly	Asn	Phe	Leu	Met																						
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Glu	Phe	Gln	Val	Lys	Asn	Val	Pro	Ser	Glu	Arg	Ile	Ala	Thr	Gln	Lys																						
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Ile	Leu	Ser	Val	Leu	Gly	Glu	Cys	Leu	Asp	His	Phe	Gly	Pro	Gly	Cys																						
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Ser	Arg	Val	Arg	Ala	Leu	Val	Phe	Ser	Val	Arg	Cys	Trp	Ala	Arg	Ala																						
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His	Ser	Leu	Thr	Ser	Ser	Ile	Pro	Gly	Ala	Trp	Ile	Thr	Asn	Phe	Ser																						
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Leu	Thr	Met	Met	Val	Ile	Phe	Phe	Leu	Gln	Arg	Arg	Ser	Pro	Pro	Ile																						
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Leu	Pro	Thr	Leu	Asp	Ser	Leu	Lys	Thr	Leu	Ala	Asp	Ala	Glu	Asp	Lys																						
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Cys	Val	Ile	Glu	Gly	Asn	Asn	Cys	Thr	Phe	Val	Arg	Asp	Leu	Ser	Arg																						
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Ile	Lys	Pro	Ser	Gln	Asn	Thr	Glu	Thr	Leu	Glu	Leu	Leu	Leu	Lys	Glu																						
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Phe	Phe	Glu	Tyr	Phe	Gly	Asn	Phe	Ala	Phe	Asp	Lys	Asn	Ser	Ile	Asn																						
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Ile	Arg	Gln	Gly	Arg	Glu	Gln	Asn	Lys	Pro	Asp	Ser	Ser	Pro	Leu	Tyr																						
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Gln	Ser	Gln	Leu	Gln	Lys	Phe	Val	Asp	Leu	Ala	Arg	Glu	Ser	Ala	Trp																						
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Ile	Leu	Gln	Gln	Glu	Asp	Thr	Asp	Arg	Pro	Ser	Ile	Ser	Ser	Asn	Arg																						
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Pro	Trp	Gly	Leu	Val	Ser	Leu	Leu	Leu	Pro	Ser	Ala	Pro																									

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 <213> Homo sapiens

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 Pro His Pro Gln Arg Gly Cys Glu Val Phe Val Gly Lys Ile Pro Arg
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 Cys Cys Ser Val Asp Asn Cys Arg Leu Phe Ile Gly Gly Ile Pro Lys
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 Asn Arg Gly Phe Ala Phe Val Glu Tyr Glu Ser His Arg Ala Ala Ala
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 <211> 505
 <212> DNA
 <213> Homo sapiens

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 Leu Ala Ser Leu Ser Ala Glu Glu Leu Lys Glu Leu Glu Arg Glu Leu
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 Glu Asp Ile Glu Pro Asp Arg Asn Leu Pro Val Gly Leu Arg Gln Lys
 65 70 75 80
 Ser Leu Thr Glu Lys Thr Pro Thr Gly Thr Phe Ser Arg Glu Ala Leu
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 Met Ala Tyr Trp Glu Lys Glu Ser Gln Lys Leu Leu Glu Lys Glu Arg
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 Leu Gly Glu Cys Gly Lys Val Ala Glu Asp Lys Glu Glu Ser Glu Glu
 115 120 125
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<210> 5536

<211> 306

<212> PRT

<213> Homo sapiens

<400> 5536

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Tyr Tyr Gln Thr Phe Phe Asp Val Asp Thr Tyr Gln Val Phe Asp Arg
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Ile Lys Gly Ser Leu Leu Pro Ile Pro Gly Lys Asn Phe Val Arg Leu
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Tyr Ile Arg Ser Asn Pro Asp Leu Tyr Gly Pro Phe Trp Ile Cys Ala
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Thr Leu Val Phe Ala Ile Ala Ile Ser Gly Asn Leu Ser Asn Phe Leu
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Val Ser Ile Ala Ala Thr Ile Ile Tyr Ala Tyr Ala Trp Leu Val Pro
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Leu Ala Leu Trp Gly Phe Leu Met Trp Arg Asn Ser Lys Val Met Asn
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Leu Phe Ile Tyr Ile Pro Thr Ala Ile Leu Trp Ile Ile Pro Gln Lys
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Ala Val Arg Trp Ile Leu Val Met Ile Ala Leu Gly Ile Ser Gly Ser
225          230          235          240
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Val Ala Leu Ala Thr Ile Val Thr Ile Val Leu Leu His Met Leu Leu
          260          265          270
Ser Val Gly Cys Leu Ala Tyr Phe Phe Asp Ala Pro Glu Met Asp His
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<210> 5537

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 5537

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<211> 352

<212> PRT

<213> Homo sapiens

<400> 5538

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Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr Ile
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Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln Trp
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Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg Asp
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Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu Asn
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Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser Ser
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<210> 5539

<211> 1887

<212> DNA

<213> Homo sapiens

<400> 5539

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<212> PRT

<213> Homo sapiens

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<211> 4021

<212> DNA

<213> Homo sapiens

<400> 5543

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<210> 5544

<211> 1141

<212> PRT

<213> Homo sapiens

<400> 5544

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Ser																			

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Ala Thr Ser Met Arg Thr Val Gly Lys Leu Pro Arg His Arg Pro Leu
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Ser Arg Thr Gln Ser Ser Pro Leu Pro Gln Ser Pro Gln Ala Leu Gln
      515              520              525
Gln Leu Val Met Gln Gln Gln His Gln Gln Phe Leu Glu Lys Gln Lys
      530              535              540
Gln Gln Gln Leu Gln Leu Gly Lys Ile Leu Thr Lys Thr Gly Glu Leu
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Asp Glu Glu Glu Asp Gly Glu Glu Glu Asp Cys Ile Gln Val Lys
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625              630              635              640
Pro Gly Ala Gly Tyr Lys Lys Leu Phe Ser Asp Ala Gln Pro Leu Gln
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<210> 5545

<211> 1932

<212> DNA

<213> Homo sapiens

<400> 5545

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<210> 5546

<211> 183
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Asn Glu Met Leu Leu Asn Phe Asn Asn Leu Ser Ser Ala Arg Leu Gln
 50 55 60
 Gln Met Ser Glu Arg Phe Leu His His Thr Arg Thr Leu Val Glu Met
 65 70 75 80
 Lys Arg Asp Leu Asp Ser Ile Phe Arg Arg Ile Arg Thr Leu Lys Gly
 85 90 95
 Lys Leu Ala Arg Gln His Pro Glu Ala Phe Ser His Ile Pro Glu Ala
 100 105 110
 Ser Phe Leu Glu Glu Glu Asp Glu Asp Pro Ile Pro Pro Ser Thr Thr
 115 120 125
 Thr Thr Ile Ala Thr Ser Glu Gln Ser Thr Gly Ser Cys Asp Thr Ser
 130 135 140
 Pro Asp Thr Val Ser Pro Ser Leu Ser Pro Gly Phe Glu Asp Leu Ser
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 165 170 175
 Asp Glu Glu Met Thr Gly Glu
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 <211> 1391
 <212> DNA
 <213> Homo sapiens

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<210> 5548

<211> 167

<212> PRT

<213> Homo sapiens

<400> 5548

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		20					25						30		
Leu	Gln	Thr	Asn	Val	Arg	Ser	Gln	Ile	Leu	Arg	Leu	Arg	His	Thr	Ala
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Phe	Val	Ile	Pro	Lys	Lys	Asn	Val	Pro	Thr	Ser	Lys	Arg	Glu	Thr	Tyr
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Thr	Glu	Asp	Phe	Ile	Lys	Lys	Gln	Ile	Glu	Glu	Phe	Asn	Ile	Gly	Lys
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Arg	His	Leu	Ala	Asn	Met	Met	Gly	Glu	Asp	Pro	Glu	Thr	Phe	Thr	Gln
			85					90					95		
Glu	Asp	Ile	Asp	Arg	Ala	Ile	Ala	Tyr	Leu	Phe	Pro	Ser	Gly	Leu	Phe
		100					105						110		
Glu	Lys	Arg	Ala	Arg	Pro	Val	Met	Lys	His	Pro	Glu	Gln	Ile	Phe	Pro
	115					120						125			
Arg	Gln	Arg	Ala	Ile	Gln	Trp	Gly	Glu	Asp	Gly	Arg	Pro	Phe	His	Tyr

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	165			

<210> 5549
 <211> 1865
 <212> DNA
 <213> Homo sapiens

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<210> 5550

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5550

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	50					55				60					
Val	Arg	Glu	Leu	Lys	Lys	Thr	Gln	Leu	Ile	Lys	Ala	Ala	Pro	Ala	Gly
	65				70					75				80	
Lys	Thr	Ser	Ser	Val	Phe	Glu	Asp	Pro	Val	Ile	Ser	Lys	Phe	Thr	Asn
			85					90						95	
Met	Met	Met	Ile	Gly	Gly	Asn	Lys	Val	Leu	Ala	Arg	Ser	Leu	Met	Ile
			100					105					110		
Gln	Thr	Leu	Glu	Ala	Val	Lys	Arg	Lys	Gln	Phe	Glu	Lys	Tyr	His	Ala
	115							120				125			
Ala	Ser	Ala	Glu	Glu	Gln	Ala	Thr	Ile	Glu	Arg	Asn	Pro	Tyr	Thr	Ile
	130					135				140					
Phe	His	Gln	Ala	Leu	Lys	Asn	Cys	Glu	Pro	Met	Ile	Gly	Leu	Val	Pro
	145				150					155				160	
Ile	Leu	Lys	Gly	Gly	Arg	Phe	Tyr	Gln	Val	Pro	Val	Pro	Leu	Pro	Asp
			165					170						175	
Arg	Arg	Arg	Arg	Phe	Leu	Ala	Met	Lys	Trp	Met	Ile	Thr	Glu	Cys	Arg
			180					185					190		
Asp	Lys	Lys	His	Gln	Arg	Thr	Leu	Met	Pro	Glu	Lys	Leu	Ser	His	Lys

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Trp	Trp				

<210> 5551
 <211> 1689
 <212> DNA
 <213> Homo sapiens

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<210> 5552
 <211> 104
 <212> PRT
 <213> Homo sapiens

<400> 5552
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 Phe Ser Val Ile Val Arg Val Val Gly Asp Leu Met Leu Arg Ile Gln
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 Arg Ile Gln Asp Phe Thr Pro Lys Leu Leu Leu Val Arg Lys Arg Leu
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<210> 5553
 <211> 274
 <212> DNA
 <213> Homo sapiens

<400> 5553
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<210> 5558

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5558

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			20					25					30		
Ser	Val	Pro	Arg	Glu	Pro	Ile	Asp	Arg	Lys	Arg	Leu	Lys	Lys	Asp	Val
		35					40					45			
Glu	Pro	Ser	Cys	Ser	Gly	Ser	Ser	Leu	Gly	Pro	Asp	Lys	Gly	Leu	Ala
	50					55					60				
Gln	Ser	Pro	Pro	Ser	Ser	Ser	Leu	Thr	Ala	Thr	Arg	Gln	Lys	Pro	Ser
65					70					75				80	
Gln	Ser	Pro	Ser	Ala	Pro	Pro	Ala	Asp	Val	Thr	Pro	Lys	Pro	Ala	Thr
			85					90					95		
Glu	Ala	Val	Gln	Ser	Glu	His	Ser	Asp	Ala	Ser	Pro	Met	Ser	Ile	Asn
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Ser Pro Ser Arg Glu	Pro Pro Lys Met Asn Pro	Val Val Glu Pro Leu		
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Tyr Pro Thr Leu Gln	Pro Phe Gln Tyr Leu Glu	Glu Val His Ile Ser		
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His Val Gly Gln Pro	Met Leu Asn Phe Ser Phe	Asn Ser Phe His Pro		
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Asp Thr Arg Lys Pro	Met His Arg Glu Cys Gly	Phe Ile Arg Leu Lys		
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Pro Asp Thr Asn Lys	Val Ala Phe Val Ser Ala	Gln Asn Thr Gly Val		
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Val Glu Val Glu Glu	Gly Glu Val Asn Gly Gln	Glu Leu Cys Ile Ala		
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 Gln Leu Ala Ala Ile Lys Val Met Asp Val Thr Glu Asp Glu Glu Glu
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 Glu Ile Lys Leu Glu Ile Asn Met Leu Lys Lys Tyr Ser His His Arg
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Gln Lys Glu Gln Arg Arg Arg Leu Glu Glu Gln Gln Arg Arg Glu Arg
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Glu Ala Arg Arg Gln Gln Glu Arg Glu Gln Arg Arg Arg Glu Gln Glu
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Glu Lys Arg Arg Leu Glu Glu Leu Glu Arg Arg Arg Lys Glu Glu Glu
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Glu Arg Arg Arg Ala Glu Glu Glu Lys Arg Arg Val Glu Arg Glu Gln
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Glu Pro Ala Asp Arg Ala Arg Glu Val Pro Val Arg Thr Thr Ser Arg
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Ser Lys Ser Glu Gly Ser Pro Ser Gln Arg Leu Glu Asn Ala Val Lys
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Lys Pro Glu Asp Lys Lys Glu Val Phe Arg Pro Leu Lys Pro Ala Gly
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Glu Val Asp Leu Thr Ala Leu Ala Lys Glu Leu Arg Ala Val Glu Asp
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Ser Gly Thr Thr Asp Glu Glu Asp Asp Asp Val Glu Gln Glu Gly Ala
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Asn Leu Ser Asn Gly Glu Thr Glu Ser Val Lys Thr Met Ile Val His
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Asp Asp Val Glu Ser Glu Pro Ala Met Thr Pro Ser Lys Glu Gly Thr
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Lys Ser Ser Ser Ser Phe Thr Pro Phe Ile Asp Pro Arg Leu Leu Gln

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Thr Pro Glu Ile Arg Lys Tyr Lys Lys Arg Phe Asn Ser Glu Ile Leu				
	835		840	845
Cys Ala Ala Leu Trp Gly Val Asn Leu Leu Val Gly Thr Glu Ser Gly				
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Leu Met Leu Leu Asp Arg Ser Gly Gln Gly Lys Val Tyr Pro Leu Ile				
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Asn Arg Arg Arg Phe Gln Gln Met Asp Val Leu Glu Gly Leu Asn Val				880
	885		890	895
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Ser Ser Val Glu Val Tyr Ala Trp Ala Pro Lys Pro Tyr His Lys Phe				
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Cys Ala Gly Phe His Ala Val Asp Val Asp Ser Gly Ser Val Tyr Asp				
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Ile Tyr Leu Pro Thr His Val Arg Lys Asn Pro His Ser Met Ile Gln				
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Cys Ser Ile Lys Pro His Ala Ile Ile Ile Leu Pro Asn Thr Asp Gly				
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Met Glu Leu Leu Val Cys Tyr Glu Asp Glu Gly Val Tyr Val Asn Thr				
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Tyr Gly Arg Ile Thr Lys Asp Val Val Leu Gln Trp Gly Glu Met Pro				
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Thr Ser Val Ala Tyr Ile Arg Ser Asn Gln Thr Met Gly Trp Gly Glu				
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Lys Ala Ile Glu Ile Arg Ser Val Glu Thr Gly His Leu Asp Gly Val				
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Phe Met His Lys Arg Ala Gln Arg Leu Lys Phe Leu Cys Glu Arg Asn				
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<212> DNA

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<213> Homo sapiens

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840

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<210> 5564

<211> 683

<212> PRT

<213> Homo sapiens

<400> 5564

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 35 40 45
 Leu Ser Asn Arg Arg Leu Lys His Phe Pro Arg Gly Ala Ala Arg Ser
 50 55 60
 Tyr Asp Leu Ser Asp Ile Thr Gln Ala Asp Leu Ser Arg Asn Arg Phe
 65 70 75 80
 Pro Glu Val Pro Glu Ala Ala Cys Gln Leu Val Ser Leu Glu Gly Leu
 85 90 95
 Ser Leu Tyr His Asn Cys Leu Arg Cys Leu Asn Pro Ala Leu Gly Asn
 100 105 110
 Leu Thr Ala Leu Thr Tyr Leu Asn Leu Ser Arg Asn Gln Leu Ser Leu
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 130 135 140
 Asn Asn Lys Leu Gly Ala Leu Pro Pro Asp Ile Gly Thr Leu Gly Ser
 145 150 155 160
 Leu Arg Gln Leu Asp Val Ser Ser Asn Glu Leu Gln Ser Leu Pro Ser
 165 170 175
 Glu Leu Cys Gly Leu Ser Ser Leu Arg Asp Leu Asn Val Arg Arg Asn
 180 185 190
 Gln Leu Ser Thr Leu Pro Glu Glu Leu Gly Asp Leu Pro Leu Val Arg
 195 200 205
 Leu Asp Phe Ser Cys Asn Arg Val Ser Arg Ile Pro Val Ser Phe Cys
 210 215 220
 Arg Leu Arg His Leu Gln Val Ile Leu Leu Asp Ser Asn Pro Leu Gln
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 Tyr Leu Ser Thr Glu Ala Gly Gln Arg Gly Ser Ala Leu Gly Asp Leu

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 Gln Ile Asp Phe Ile Asp Ser His Val Pro Gly Glu Asp Glu Glu Arg
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 Asp Arg Glu Arg Ala Pro Ser Ser Arg Arg Glu Glu Pro Ala Gly Glu
 385 390 395 400
 Glu Arg Arg Arg Pro Asp Thr Leu Gln Leu Trp Gln Glu Arg Glu Arg
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 Arg Gln Gln Gln Gln Ser Gly Ala Trp Gly Ala Pro Arg Lys Asp Ser
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 Leu Leu Lys Pro Gly Leu Arg Ala Val Val Gly Gly Ala Ala Val
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 Ser Thr Gln Ala Met His Asn Gly Ser Pro Lys Ser Ser Ala Ser Gln
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 485 490 495
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 Ser Gln Ser Gly Ser Gly Pro Ser Ser Pro Asp Ser Val Leu Arg Pro
 515 520 525
 Arg Arg Tyr Pro Gln Val Pro Asp Glu Lys Asp Leu Met Thr Gln Leu
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 Ala Glu Ala Leu Ala Ser Gly Val Ile Leu Cys Gln Leu Ala Asn Gln
 565 570 575
 Leu Arg Pro Arg Ser Val Pro Phe Ile His Val Pro Ser Pro Ala Val
 580 585 590
 Pro Lys Leu Ser Ala Leu Lys Ala Arg Lys Asn Val Glu Ser Phe Leu
 595 600 605
 Glu Ala Cys Arg Lys Met Gly Val Pro Glu Ala Asp Leu Cys Ser Pro
 610 615 620
 Ser Asp Leu Leu Gln Gly Thr Ala Arg Gly Leu Arg Thr Ala Leu Glu
 625 630 635 640
 Ala Val Lys Arg Val Gly Gly Lys Ala Leu Pro Pro Leu Trp Pro Pro
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 Ser Gly Leu Gly Gly Phe Val Val Phe Tyr Val Val Leu Met Leu Leu
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<211> 472
<212> DNA
<213> Homo sapiens

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240
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360
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<210> 5566
<211> 76
<212> PRT
<213> Homo sapiens

<400> 5566
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20 25 30
Leu Pro Pro Arg Leu Glu Ser Gly Gly Ala Ile Thr Ala His Ser Ser
35 40 45
Leu Asp Leu Gln Gly Ser Ser Asp Pro Pro Ala Ser Ala Ser Arg Ala
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Ala Gly Ser Thr Gly Ala Tyr His Ala Trp Leu Phe
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<210> 5567
<211> 968
<212> DNA
<213> Homo sapiens

<400> 5567
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<210> 5568

<211> 130

<212> PRT

<213> Homo sapiens

<400> 5568

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 His Arg Ser Ile His Leu Ala Pro Leu Gln Ile Trp Val Leu Cys Lys
 35 40 45
 Ile Leu Pro Trp Asp Thr Glu Gly Lys Ser Asp Thr Ala Leu Leu Ser
 50 55 60
 Ser Ser Gln Thr Leu Arg Tyr Pro Asp Thr Thr Ala Leu Ile Val Ser
 65 70 75 80
 Glu Asn Thr Ala Thr Ser Ala Gly Lys Tyr Gln Arg Cys Phe Thr Arg
 85 90 95
 Tyr Met Tyr Gln Ile Leu Lys Ala Ala Val Pro Lys Tyr His Lys Leu
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 His Gly Leu Lys Gln Gln Lys Phe Ile Pro Ser Gln Ser Trp Arg Pro
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 Asp Val
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<210> 5569

<211> 876

<212> DNA

<213> Homo sapiens

<400> 5569

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<210> 5570

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5570

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20           25           30
Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val Phe Glu Asp
35           40           45
Gly Asn Ile Asn Val Asn Lys Gly Met Gly Arg Phe Ile Pro Arg Lys
50           55           60
Ala Phe Pro Glu His Ser Thr Trp Leu Glu Leu His Asn His Gly
65           70           75           80
Arg Arg His Val Cys Glu Ala Ser Trp Gly Cys Thr Ala Asp Pro Leu
85           90           95
Leu Ser Pro Leu Ala Leu Ser Ala Ala Phe Met Trp Leu Ser Pro Ser

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          100          105          110
Val Leu Gln Ala Phe Ile Ser Phe Arg Ala Ala Pro Ser Leu Cys Pro
          115          120          125
Gly Thr Leu Ala Lys Met Gln Cys Leu Pro Asn Ser His Ile Ser Phe
          130          135          140
Asn Gln Gly Ala Ile Pro Ala Trp Lys Ser Pro Ser Cys Ser Cys Trp
145          150          155          160
Gln Val Gln Val Pro Val Cys Asp Gly
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<210> 5571

<211> 405

<212> DNA

<213> Homo sapiens

<400> 5571

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<210> 5572

<211> 135

<212> PRT

<213> Homo sapiens

<400> 5572

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          20          25          30
Gln Leu Arg Asp Pro Thr Ser Pro Lys Phe Pro Glu Asp Phe Asp Asp
          35          40          45
Gly Glu His Ala Lys Gln Lys Ser Val Ile Ser Trp Leu Leu Asn His
          50          55          60
Asp Pro Ala Lys Arg Pro Thr Ala Thr Glu Leu Leu Lys Ser Glu Leu
65          70          75          80
Leu Pro Pro Pro Gln Met Glu Glu Ser Glu Leu His Glu Val Leu His
          85          90          95
His Thr Leu Thr Asn Val Asp Gly Lys Ala Tyr Arg Thr Met Met Ala
          100          105          110
Gln Ile Phe Ser Gln Arg Leu Ala Gly Ala Gly Gly Gly Tyr Arg
          115          120          125
Ser Arg Leu Gly Val Pro Arg

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130

135

<210> 5573

<211> 1279

<212> DNA

<213> Homo sapiens

<400> 5573

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<210> 5574

<211> 312

<212> PRT

<213> Homo sapiens

<400> 5574

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      20           25           30
Ala Glu Ile Glu Glu Ala Leu Gln Ala Gly Leu Ala Pro Leu Gly Glu
      35           40           45
Tyr Arg Leu Leu Gly Arg Met Phe Arg Arg Asp Glu Asn Arg Lys Val
      50           55           60
Ala Leu Val Gly Leu Thr Ala Glu Thr Ser His Ala Leu Val Pro Lys
      65           70           75           80
Glu Ile Pro Gly Lys Gly Gly Ile Trp Arg Val Ile Phe Lys Pro Pro
      85           90           95
Asp Pro Asp Asn Thr Phe Leu Ser Arg Leu Asn Glu Phe Leu Ala Gly
      100           105           110
Glu Gly Met Thr Val Gly Glu Leu Ser Arg Ala Leu Gly His Glu Asn
      115           120           125
Gly Ser Leu Asp Pro Glu Gln Gly Met Ile Pro Glu Met Trp Ala Pro
      130           135           140
Met Leu Ala Gln Ala Leu Glu Ala Leu Gln Pro Ala Leu Gln Cys Leu
      145           150           155           160
Lys Tyr Lys Lys Leu Arg Val Phe Ser Gly Arg Glu Ser Pro Glu Pro
      165           170           175
Gly Glu Glu Glu Phe Gly Arg Trp Met Phe His Thr Thr Gln Met Ile
      180           185           190
Lys Ala Trp Gln Val Pro Asp Val Glu Lys Arg Arg Arg Leu Leu Glu
      195           200           205
Ser Leu Arg Gly Pro Ala Leu Asp Val Ile Arg Val Leu Lys Ile Asn
      210           215           220
Asn Pro Leu Ile Thr Val Asp Glu Cys Leu Gln Ala Leu Glu Glu Val
      225           230           235           240
Phe Gly Val Thr Asp Asn Pro Arg Glu Leu Gln Val Lys Tyr Leu Thr
      245           250           255
Thr Tyr Gln Lys Asp Glu Glu Lys Leu Ser Ala Tyr Val Leu Arg Leu
      260           265           270
Glu Pro Leu Leu Gln Lys Leu Val Gln Arg Gly Ala Ile Glu Arg Asp
      275           280           285
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Lys Thr Ile Arg Arg Glu Leu Asn
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<210> 5575

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 5575

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1680

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 1740
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 1800
 cttgtctttc agagttgtta gtttactcca ttctttgtga cagcagtcac gtggctcaca
 1860
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 1920
 ctgccccctt ccaccccaa ccacatttga ctgtagcatt gcactctgtg cctgttgtca
 1980
 tttatgttaa ccttcaggtt ttaaacttgc tgcatactct gacatatctt gagattctgc
 2040
 atgtcttgta aagagagggg atgtgcattt gtgtgtgatg ttggatagtc atccacgtc
 2100
 agtttgacc attggaggaa cttagtgtca cgcacaaatg gggctattcc tacgcttaga
 2160
 atagggtctg tctgccact ttagaagagt ccagggttgt gagcatttag agggaagcag
 2220
 ggcagaactc tgaacgacaa tacgtctctc tgagcagaga cccctttgtt cttgttatcc
 2280
 acccatatgg acttggaatc aatcttgcca aatatttgga gagattgtgt ggatttaaga
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 2400
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 2405

<210> 5576
 <211> 367
 <212> PRT
 <213> Homo sapiens

<400> 5576
 Met Ala Asp Phe Gly Ile Ser Ala Gly Gln Phe Val Ala Val Val Trp
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 Asp Lys Ser Ser Pro Val Glu Ala Leu Lys Gly Leu Val Asp Lys Leu
 20 25 30
 Gln Ala Leu Thr Gly Asn Glu Gly Arg Val Ser Val Glu Asn Ile Lys
 35 40 45
 Gln Leu Leu Gln Cys Leu Val Pro Gly Ser Thr Thr Leu His Ser Ala
 50 55 60
 Glu Ile Leu Ala Glu Ile Ala Arg Ile Leu Arg Pro Gly Gly Cys Leu
 65 70 75 80
 Phe Leu Lys Glu Pro Val Glu Thr Ala Val Asp Asn Asn Ser Lys Val
 85 90 95
 Lys Thr Ala Ser Lys Leu Cys Ser Ala Leu Thr Leu Ser Gly Leu Val
 100 105 110
 Glu Val Lys Glu Leu Gln Arg Glu Pro Leu Thr Pro Glu Glu Val Gln
 115 120 125
 Ser Val Arg Glu His Leu Gly His Glu Ser Asp Asn Leu Leu Phe Val
 130 135 140
 Gln Ile Thr Gly Lys Lys Pro Asn Phe Glu Val Gly Ser Ser Arg Gln
 145 150 155 160
 Leu Lys Leu Ser Ile Thr Lys Lys Ser Ser Pro Ser Val Lys Pro Ala

	165		170		175										
Val	Asp	Pro	Ala	Ala	Lys	Leu	Trp	Thr	Leu	Ser	Ala	Asn	Asp	Met	
	180		185		190										
Glu	Asp	Asp	Ser	Met	Cys	Ile	Phe	Cys	Gly	Cys	Ser	Leu	Thr	His	Arg
	195		200		205										
Trp	Pro	Leu	Glu	His	Val	Val	Arg	Leu	Asn	Met	Met	Ile	Asn	Gln	Lys
	210		215		220										
Glu	Asp	Arg	Val	Asp	Thr	Phe	Phe	Thr	Leu	Asp	Ser	Lys	Phe	Pro	Leu
225			230		235									240	
Glu	Ala	Cys	Ser	His	Phe	Ser	Phe	Ser	Leu	Ala	Glu	Thr	Thr	Thr	Val
	245		250		255										
Ser	Leu	Ile	Ala	Leu	Asn	Thr	Leu	Gln	Asp	Leu	Ile	Asp	Ser	Asp	Glu
	260		265		270										
Leu	Leu	Asp	Pro	Glu	Asp	Leu	Lys	Lys	Pro	Asp	Pro	Ala	Ser	Leu	Arg
	275		280		285										
Ala	Ala	Ser	Cys	Gly	Glu	Gly	Lys	Lys	Arg	Lys	Ala	Cys	Lys	Asn	Cys
290			295		300										
Thr	Cys	Gly	Leu	Ala	Glu	Glu	Leu	Glu	Lys	Glu	Lys	Ser	Arg	Glu	Gln
305			310		315									320	
Met	Ser	Ser	Gln	Pro	Lys	Ser	Ala	Cys	Gly	Asn	Cys	Tyr	Leu	Gly	Asp
	325		330		335										
Ala	Phe	Arg	Cys	Ala	Ser	Cys	Pro	Tyr	Leu	Gly	Met	Pro	Ala	Phe	Lys
	340		345		350										
Pro	Gly	Glu	Lys	Val	Leu	Leu	Ser	Asp	Ser	Asn	Leu	His	Asp	Ala	
	355		360		365										

<210> 5577

<211> 659

<212> DNA

<213> Homo sapiens

<400> 5577

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120
cctgtggccg acatgagggc actcctgaca ggcaaggact gccccatgt ccgggagaag
180
ggctccggga agcagaacaa ggacctctat gagttggcct tctcaatcag ctatgaccgt
240
ggggaggagg aagcgtacct caacttcatt gccccctcca agcgggagtt ctacctgtgg
300
acagatgggc tcaagtgcctt gctgggcagt cccatgggca gcgagcagac acggctggac
360
ctggagcagc tgctgaccat ggagaccaag ctgcgtctgc tggagctgga gaacgtgccc
420
atccccgagc ggccaccccc tgtgccccca cccccacca acttcaactt ctgctatgac
480
tgcagcatcg ctgaaccttg acagtgtggc tggccatggg ccacagctgc ggccactgca
540
gcagccatga agggcagtggt gtagaggagt gcaggcacc tgaccagcag agattgctgc
600
agaaataaag tctgcttggc tcttgggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
659

<210> 5578
 <211> 166
 <212> PRT
 <213> Homo sapiens

<400> 5578
 Leu His Ala Asp Lys Leu Trp Phe Cys Cys Leu Ser Pro Asn His Lys
 1 5 10 15
 Leu Leu Gln Tyr Gly Asp Met Glu Glu Gly Xaa Gln Pro Ala Tyr Pro
 20 25 30
 Xaa Glu Ser Leu Pro Glu Gln Leu Pro Val Ala Asp Met Arg Ala Leu
 35 40 45
 Leu Thr Gly Lys Asp Cys Pro His Val Arg Glu Lys Gly Ser Gly Lys
 50 55 60
 Gln Asn Lys Asp Leu Tyr Glu Leu Ala Phe Ser Ile Ser Tyr Asp Arg
 65 70 75 80
 Gly Glu Glu Glu Ala Tyr Leu Asn Phe Ile Ala Pro Ser Lys Arg Glu
 85 90 95
 Phe Tyr Leu Trp Thr Asp Gly Leu Ser Ala Leu Leu Gly Ser Pro Met
 100 105 110
 Gly Ser Glu Gln Thr Arg Leu Asp Leu Glu Gln Leu Leu Thr Met Glu
 115 120 125
 Thr Lys Leu Arg Leu Leu Glu Leu Glu Asn Val Pro Ile Pro Glu Arg
 130 135 140
 Pro Pro Pro Val Pro Pro Pro Pro Thr Asn Phe Asn Phe Cys Tyr Asp
 145 150 155 160
 Cys Ser Ile Ala Glu Pro
 165

<210> 5579
 <211> 1312
 <212> DNA
 <213> Homo sapiens

<400> 5579
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 ccagcaccgc ctcttcaacc atctgggggtg ccaacaagtg gaccatctca gaccaccata
 120
 cacttactac ctacagctcc aactaccgtg aatgtaacac atcgtccagt aactcagggtg
 180
 accacaagac tcctgtgacc aagagctcct gcaaaccacc aggtgggttta tacaactctt
 240
 cctgcaccac cagctcaggc tccttgcca ggaactgtta tgcaggtcc tgctgttcgg
 300
 caggtcaatc cccaaaatag tggtacagtt cgagtgcctc aaacaaccac atatgttgta
 360
 aacaatggac taaccctggg atcaacagga cctcagctca cagtgcaccca cggaccacca
 420
 caagtgcata ctgagccccc acgccccgtg caccagcac ccttaccaga agctccacaa
 480
 ccacagcgtc tgccccaga agctgccagc acatctctgc ctcagaagcc acacttgaag
 540

ttagcacgcg ttcagagtca aaatggcata gtactgtcat ggagtgtcct ggaggtggat
 600
 cgaagctgtg ccactgttga tagctaccat ctctatgctt accatgagga acccagtgcc
 660
 actgtgccct cacaatggaa aaagattggg gaagtcaagg cacttccctt gcccatggca
 720
 tgtactctca ccagtttgt atctggtagc aaatactact ttgcagtacg agccaaggat
 780
 atttatggac gttttgggcc tttctgtgat cctcagtcaa cagatgtgat ctcttctacc
 840
 cagagcagtt aaaccttggg gcctttatat tttctctttt taaaatttcc accttttggg
 900
 cttgttttta atcttgtgca tgatacccca tgtaaaatcc accttgtgca agatttcttg
 960
 gacagatgtg tgtatacact acatttgttt ataaccagaa gcaaaataaa ctcagcccac
 1020
 aaagctagaa tcttttcttg gacagtttag gctttggggg ttggaaatgt aaatgtgtac
 1080
 cttgctttag ttttgaggct ggggaatatg tgtgggtgtt tatgtgtgtt tttcttatg
 1140
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 1200
 agtaagtaga tcaaaggatt tgagatgtgt aactggcatg attctgcttt tgaaggatct
 1260
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 1312

<210> 5580

<211> 283

<212> PRT

<213> Homo sapiens

<400> 5580

Thr Pro Val Ser Thr Met Ser Ser Ser Gln Pro Val Ser Arg Pro Leu
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 Gln Pro Ile Gln Pro Ala Pro Pro Leu Gln Pro Ser Gly Val Pro Thr
 20 25 30
 Ser Gly Pro Ser Gln Thr Thr Ile His Leu Leu Pro Thr Ala Pro Thr
 35 40 45
 Thr Val Asn Val Thr His Arg Pro Val Thr Gln Val Thr Thr Arg Leu
 50 55 60
 Pro Val Pro Arg Ala Pro Ala Asn His Gln Val Val Tyr Thr Thr Leu
 65 70 75 80
 Pro Ala Pro Pro Ala Gln Ala Pro Leu Arg Gly Thr Val Met Gln Ala
 85 90 95
 Pro Ala Val Arg Gln Val Asn Pro Gln Asn Ser Val Thr Val Arg Val
 100 105 110
 Pro Gln Thr Thr Thr Tyr Val Val Asn Asn Gly Leu Thr Leu Gly Ser
 115 120 125
 Thr Gly Pro Gln Leu Thr Val His His Arg Pro Pro Gln Val His Thr
 130 135 140
 Glu Pro Pro Arg Pro Val His Pro Ala Pro Leu Pro Glu Ala Pro Gln
 145 150 155 160
 Pro Gln Arg Leu Pro Pro Glu Ala Ala Ser Thr Ser Leu Pro Gln Lys

165								170				175			
Pro	His	Leu	Lys	Leu	Ala	Arg	Val	Gln	Ser	Gln	Asn	Gly	Ile	Val	Leu
180								185				190			
Ser	Trp	Ser	Val	Leu	Glu	Val	Asp	Arg	Ser	Cys	Ala	Thr	Val	Asp	Ser
195								200				205			
Tyr	His	Leu	Tyr	Ala	Tyr	His	Glu	Glu	Pro	Ser	Ala	Thr	Val	Pro	Ser
210								215				220			
Gln	Trp	Lys	Lys	Ile	Gly	Glu	Val	Lys	Ala	Leu	Pro	Leu	Pro	Met	Ala
225								230				235			
Cys	Thr	Leu	Thr	Gln	Phe	Val	Ser	Gly	Ser	Lys	Tyr	Tyr	Phe	Ala	Val
245								250				255			
Arg	Ala	Lys	Asp	Ile	Tyr	Gly	Arg	Phe	Gly	Pro	Phe	Cys	Asp	Pro	Gln
260								265				270			
Ser	Thr	Asp	Val	Ile	Ser	Ser	Thr	Gln	Ser	Ser					
275								280							

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<210> 5581
<211> 720
<212> DNA
<213> Homo sapiens
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<400> 5581
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aagcccagct gctctacaga ctctcgcttc acccgacgc cgggtccac cgtgtctctc
120
gcgtcccgcg agctgcctgt ctctcgctgg caggtcaccg agcgtcaag caagaatctg
180
tgggagcaga tctgcaagga gtatgaagct gaggcctc cctttccaga aggatataaa
240
gtcaaacagg agcctgtgat tacggttgcg ccagtagagg aaatgctttt tcatggttc
300
agtgcagagc actattttcc ggtttcccat ttcaccatga tctcagtac accctgtcct
360
caagataaat cggaacaat caacccaaaa acatgttctc ccaaagaata tttggaaact
420
ttcatctttc ctgttctgct tcccggaatg gctagcctgc ttcaccaagc gaagaaagaa
480
aaatgttttg aggtcagttg tttggcagga tttctttatt ttgagattct caatcattca
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600
tcgggagggg aagcctgtgt ttggggctac ttaccagtt ccagccacac catctagtgt
660
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720

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<210> 5582
<211> 212
<212> PRT
<213> Homo sapiens
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<400> 5582
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Ser Cys Ser Thr Asp Ser Ser Phe Thr Arg Thr Pro Val Pro Thr Val			
	20	25	30
Ser Leu Ala Ser Arg Glu Leu Pro Val Ser Ser Trp Gln Val Thr Glu			
	35	40	45
Pro Ser Ser Lys Asn Leu Trp Glu Gln Ile Cys Lys Glu Tyr Glu Ala			
	50	55	60
Glu Gln Pro Pro Phe Pro Glu Gly Tyr Lys Val Lys Gln Glu Pro Val			
65	70	75	80
Ile Thr Val Ala Pro Val Glu Glu Met Leu Phe His Gly Phe Ser Ala			
	85	90	95
Glu His Tyr Phe Pro Val Ser His Phe Thr Met Ile Ser Arg Thr Pro			
	100	105	110
Cys Pro Gln Asp Lys Ser Glu Thr Ile Asn Pro Lys Thr Cys Ser Pro			
	115	120	125
Lys Glu Tyr Leu Glu Thr Phe Ile Phe Pro Val Leu Leu Pro Gly Met			
	130	135	140
Ala Ser Leu Leu His Gln Ala Lys Lys Glu Lys Cys Phe Glu Val Ser			
145	150	155	160
Cys Leu Ala Gly Phe Leu Tyr Phe Glu Ile Leu Asn His Ser Leu Leu			
	165	170	175
Ser Asp Asp Ser Ser Leu Ser Trp Tyr His Gln Val Val Leu Gln Met			
	180	185	190
Thr Pro Ser Gly Gly Lys Ala Cys Val Trp Gly His Leu Pro Ser Ser			
	195	200	205
Ser His Thr Ile			
210			

<210> 5583

<211> 2101

<212> DNA

<213> Homo sapiens

<400> 5583

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120
gtggggccca ctgcgggccc agcccccaat gccttcacca gtacctgga gaaggtcgga
180
gaccatcagt tctctctcta ctcaggccgg tccccgcta cgccactgg gttggtgcac
240
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300
ctggatgaga cgggtgtgtg ggtggtgcac gtctctggcc ccattaaccc ccaggtgtc
360
aaaagcaaag cagccaagga gctcaaggcg ctgcaggact tggcacggaa ggaaatgctg
420
gagctcttgg acatgccagc ggcggagctg cttcaagacc accagctcct ctgggctcag
480
ctcttcagcc caggagtgga aatgaagaag atcactgaca cccacacgcc gtctggcctc
540
accgtgaacc tgacgtctta ttacatgtc tctgtctgc cagccccact gctcagcccc
600

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tccctgagcc acagggagcg agaccagatg gagtcgacgc tcaactatga agatcactgc
660
ttcagcgggc acgccaccat gcacgccgag aacctgtggc cggggcggtc gtctccgtc
720
cagcagatcc tgcagctctc tgacctgtgg aggctgaccc tccagaagcg tggctgcaag
780
gggctgggtga aggtgggtgc cccaggcatc ctgcagggga tgggtgctcag ctttgggggg
840
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900
tatgcattgc atggcatccg ctacaagaac gaccatatca acctggccgt gctgcggatg
960
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1020
tatgcctgca aggcaggctg cctggacgag ccagtggagc tgacctcggc gccacgggc
1080
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1200
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1260
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1320
ggagccaage ccctcttcag gagtaaggaa gatcccagtg tctgagtga ctaacagtcc
1380
tgctttcagc caccatttgc acaagacacc cagcactgaa agtcccgtg ccaggagcaa
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1560
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1620
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1680
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1740
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1800
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1920
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1980
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2100
a
2101

<210> 5584

<211> 454

<212> PRT

<213> Homo sapiens

<400> 5584

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Xaa Gly Arg Asp Cys Val Leu Leu Gln Glu Asp Phe Leu Ala His Arg
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Gly Arg Pro His Val Tyr Leu Gln Arg Ile Gln Leu Asn Asn Pro Thr
 20           25           30
Glu Arg Val Ala Ala Leu Gln Thr Val Gly Pro Thr Ala Gly Pro Ala
 35           40           45
Pro Asn Ala Phe Thr Ser Thr Leu Glu Lys Val Gly Asp His Gln Phe
 50           55           60
Leu Leu Tyr Ser Gly Arg Ser Pro Pro Thr Pro Thr Gly Leu Val His
 65           70           75           80
Leu Val Val Val Ala Ala Lys Lys Leu Val Asn Arg Leu Gln Val Ala
 85           90           95
Pro Lys Thr Gln Leu Asp Glu Thr Val Leu Trp Val Val His Val Ser
100          105          110
Gly Pro Ile Asn Pro Gln Val Leu Lys Ser Lys Ala Ala Lys Glu Leu
115          120          125
Lys Ala Leu Gln Asp Leu Ala Arg Lys Glu Met Leu Glu Leu Leu Asp
130          135          140
Met Pro Ala Ala Glu Leu Leu Gln Asp His Gln Leu Leu Trp Ala Gln
145          150          155          160
Leu Phe Ser Pro Gly Val Glu Met Lys Lys Ile Thr Asp Thr His Thr
165          170          175
Pro Ser Gly Leu Thr Val Asn Leu Thr Leu Tyr Tyr Met Leu Ser Cys
180          185          190
Ser Pro Ala Pro Leu Leu Ser Pro Ser Leu Ser His Arg Glu Arg Asp
195          200          205
Gln Met Glu Ser Thr Leu Asn Tyr Glu Asp His Cys Phe Ser Gly His
210          215          220
Ala Thr Met His Ala Glu Asn Leu Trp Pro Gly Arg Leu Ser Ser Val
225          230          235          240
Gln Gln Ile Leu Gln Leu Ser Asp Leu Trp Arg Leu Thr Leu Gln Lys
245          250          255
Arg Gly Cys Lys Gly Leu Val Lys Val Gly Ala Pro Gly Ile Leu Gln
260          265          270
Gly Met Val Leu Ser Phe Gly Gly Leu Gln Phe Thr Glu Asn His Leu
275          280          285
Gln Phe Gln Ala Asp Pro Asp Val Leu His Asn Ser Tyr Ala Leu His
290          295          300
Gly Ile Arg Tyr Lys Asn Asp His Ile Asn Leu Ala Val Leu Arg Met
305          310          315          320
Pro Arg Ala Ser Pro Thr Tyr Thr Cys Pro Trp Ser Pro Val Ala Ser
325          330          335
Leu Ser Xaa Ile Tyr Ala Cys Lys Ala Gly Cys Leu Asp Glu Pro Val
340          345          350
Glu Leu Thr Ser Ala Pro Thr Gly His Thr Phe Ser Val Met Val Thr
355          360          365
Gln Pro Ile Thr Pro Leu Leu Tyr Ile Ser Thr Asp Leu Thr His Leu
370          375          380
Gln Asp Leu Arg His Thr Leu His Leu Lys Ala Ile Leu Ala His Asp

```

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385          390          395          400
Glu His Met Ala Gln Asp Pro Gly Leu Pro Phe Leu Phe Trp Phe
          405          410          415
Ser Val Ala Ser Leu Ile Thr Leu Phe His Leu Phe Leu Phe Lys Leu
          420          425          430
Ile Tyr Asn Glu Tyr Cys Gly Pro Gly Ala Lys Pro Leu Phe Arg Ser
          435          440          445
Lys Glu Asp Pro Ser Val
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<210> 5585
<211> 740
<212> DNA
<213> Homo sapiens

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<400> 5585
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120
ctcacaagaa taaaatatac aatgctacat tgagtgggta aaaatacaca aaaaagtagt
180
tttaacaatc tataaathtt ttataactaa aatcatgatt gaggtgaaat aaaaaagtcg
240
atttcaattg ctaaaaaaat aatatcggtg tagttaacac aagggggaaa tcagtacatt
300
gagggatctg acaggatgct ggaaaaaatg actcaggga ggcgggcagc atgggctcct
360
ttggagattc aggagcggag ctcatgtcca cctcactgca gttccctggg gccaaagcagc
420
cctcctctcc ccagtatctt tcccatctta agagatcctg tectacctac ctgtcacctc
480
cccaacccaa agactcctct aaacttcttt gcagcatgac agctgcctgc cctacactga
540
gtctacttga ctttcaattg cgtctccgca gagaggtagg agagggacac tgccccattc
600
tggacttgac ataagtaccc cagccacatg gccttcatcc ttatgaccta gcaggcagaa
660
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720
acaagctttg taaacctaac
740

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<210> 5586
<211> 87
<212> PRT
<213> Homo sapiens

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<400> 5586
Met Gly Ser Phe Gly Asp Ser Gly Ala Glu Leu Ser Ser Thr Ser Leu
1          5          10          15
Gln Phe Pro Gly Ala Lys Gln Pro Ser Ser Pro Gln Tyr Leu Ser His
          20          25          30
Leu Lys Arg Ser Cys Pro Thr Tyr Leu Ser Pro Pro Gln Pro Lys Asp

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```

          35          40          45
Ser Ser Lys Leu Leu Cys Ser Met Thr Ala Ala Cys Pro Thr Leu Ser
   50          55          60
Leu Leu Asp Leu Gln Leu Arg Leu Arg Arg Glu Val Gly Glu Gly His
65          70          75          80
Cys Pro Ile Leu Asp Leu Thr
          85

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<210> 5587
 <211> 853
 <212> DNA
 <213> Homo sapiens

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<400> 5587
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120
ttcattgttt tctcaatttg cttcagaaaa acttgcggga ttcgtccaca taaagtgtgc
180
acagtctcca aaaacttcag ctgaaggggg taatacatgg attgaaagag attgtcttga
240
aagggaataat cccgtattgc ttcataagat gctctgaacg ttggttgctt atcgtcatgg
300
tagacgctc ggtttccatg cagaacagac acaccttcat gtcagcctc tctgcagttg
360
cttccgtaca tgcagtgatc gggacggtag ttccactggc aggggaatac atagagacac
420
tctgggttga aataaaaaat aatatttaat aaatcctggt ctccccacgt gatggcattc
480
ttgtacttct ggtacagagg gtacaacatg tcctcccaag ccaggcctgt tggaatcatg
540
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<210> 5588
 <211> 204
 <212> PRT
 <213> Homo sapiens

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<400> 5588
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Lys Tyr Lys Asn Ala Ile Thr Trp Gly Asp Gln Asp Leu Leu Asn Ile
65      70      75      80
Ile Phe Tyr Phe Asn Pro Glu Cys Leu Tyr Val Phe Pro Cys Gln Trp
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Asn Tyr Arg Pro Asp His Cys Met Tyr Gly Ser Asn Cys Arg Glu Ala
      100      105      110
Glu His Glu Gly Val Ser Val Leu His Gly Asn Arg Gly Val Tyr His
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Asp Asp Lys Gln Pro Thr Phe Arg Ala Leu Tyr Glu Ala Ile Arg Asp
      130      135      140
Phe Pro Phe Gln Asp Asn Leu Phe Gln Ser Met Tyr Tyr Pro Leu Gln
145      150      155      160
Leu Lys Phe Leu Glu Thr Val His Thr Leu Cys Gly Arg Ile Pro Gln
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<210> 5589

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 5589

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720

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<211> 207

<212> PRT

<213> Homo sapiens

<400> 5590

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Glu	Glu	Gln	Glu	Glu	Arg	Lys	Pro	Ser	Ala	Thr	Gln	Gln	Lys	Lys	Asn
		35				40					45				
Thr	Lys	Leu	Ser	Ser	Lys	Thr	Ala	Lys	Leu	Ser	Thr	Ser	Ala	Lys	
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Cys	Ser	Ala	Gly	Pro	Lys	Gly	Asp	Asn	Ile	Tyr	Glu	Trp	Arg	Ser	Thr
			85					90				95			
Ile	Leu	Gly	Pro	Pro	Gly	Ser	Val	Tyr	Glu	Gly	Gly	Val	Phe	Phe	Leu
		100					105					110			
Asp	Ile	Thr	Phe	Ser	Ser	Asp	Tyr	Pro	Phe	Lys	Pro	Pro	Lys	Val	Thr
	115					120					125				
Phe	Arg	Thr	Arg	Ile	Tyr	His	Cys	Asn	Ile	Asn	Ser	Gln	Gly	Val	Ile
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Cys	Leu	Asp	Ile	Leu	Lys	Asp	Asn	Trp	Ser	Pro	Ala	Leu	Thr	Ile	Ser
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Lys	Val	Leu	Leu	Ser	Ile	Cys	Ser	Leu	Leu	Thr	Asp	Cys	Asn	Pro	Ala
			165					170				175			
Asp	Pro	Leu	Val	Gly	Ser	Ile	Ala	Thr	Gln	Tyr	Leu	Thr	Asn	Arg	Ala
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<210> 5591
<211> 2194
<212> DNA
<213> Homo sapiens

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<210> 5592

<211> 580

<212> PRT

<213> Homo sapiens

<400> 5592

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 Phe Pro Lys Ala Leu Gly Gln Leu Ile Ser Lys Tyr Ser Leu Arg Glu
 65 70 75 80
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 85 90 95Pro Phe Leu
 Gln Ala Pro Ser Gly Ala Glu Leu Trp Val Trp Phe
 100 105 110
 Gln Asp Thr Val Thr Asp Val Asp Lys Ser Trp Arg Glu Leu Ser Asn
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Val Cys Thr Glu Asn Leu Thr Pro Trp Lys Lys Leu Leu Pro Cys Ser
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Ser Lys Ala Gly Leu Ser Val Leu Leu Lys Ala Asp Arg Leu Phe His
          195          200          205
Thr Ser Tyr His Ser Gln Ala Val His Ile Arg Pro Val Cys Arg Asn
          210          215          220
Ala Arg Cys Thr Ser Ile Ser Trp Glu Leu Arg Gln Thr Leu Ser Val
225          230          235          240
Val Phe Asp Ala Phe Ile Thr Gly Gln Gly Lys Lys Asp Trp Ser Leu
          245          250          255
Phe Arg Met Phe Ser Arg Thr Leu Thr Glu Pro Cys Pro Leu Ala Ser
          260          265          270
Glu Ser Arg Val Tyr Val Asp Ile Thr Thr Tyr Asn Gln Pro Cys Leu
          275          280          285
Cys Val Gln Asp Asn Glu Thr Leu Glu Val His Pro Pro Pro Thr Thr
          290          295          300
Thr Tyr Gln Asp Val Ile Leu Gly Thr Arg Lys Thr Tyr Ala Ile Tyr
305          310          315          320
Asp Leu Leu Asp Thr Ala Met Ile Asn Asn Ser Arg Asn Leu Asn Ile
          325          330          335
Gln Leu Lys Trp Lys Arg Pro Pro Glu Asn Glu Ala Pro Pro Val Pro
          340          345          350
Phe Leu His Ala Gln Arg Tyr Val Ser Gly Tyr Gly Leu Gln Lys Gly
          355          360          365
Glu Leu Ser Thr Leu Leu Tyr Asn Thr His Pro Tyr Arg Ala Phe Pro
          370          375          380
Val Leu Leu Leu Asp Thr Val Pro Trp Tyr Leu Arg Leu Tyr Val His
385          390          395          400
Thr Leu Thr Ile Thr Ser Lys Gly Lys Glu Asn Lys Pro Ser Tyr Ile
          405          410          415
His Tyr Gln Pro Ala Gln Asp Arg Leu Gln Pro His Leu Leu Glu Met
          420          425          430
Leu Ile Gln Leu Pro Ala Asn Ser Val Thr Lys Val Ser Ile Gln Phe
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Glu Arg Ala Leu Leu Lys Trp Thr Glu Tyr Thr Pro Asp Pro Asn His
          450          455          460
Gly Phe Tyr Val Ser Pro Ser Val Leu Ser Ala Leu Val Pro Ser Met
          465          470          475          480
Val Ala Ala Lys Pro Val Asp Trp Glu Glu Ser Pro Leu Phe Asn Ser
          485          490          495
Leu Phe Pro Val Ser Asp Gly Ser Asn Tyr Phe Val Arg Leu Tyr Thr
          500          505          510
Glu Pro Leu Leu Val Asn Leu Pro Thr Pro Asp Phe Ser Met Pro Tyr
          515          520          525
Asn Val Ile Cys Leu Thr Cys Thr Val Val Ala Val Cys Tyr Gly Ser
          530          535          540
Phe Tyr Asn Leu Leu Thr Arg Thr Phe His Ile Glu Glu Pro Arg Thr
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Val Pro Pro Leu

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580

<210> 5593

<211> 3078

<212> DNA

<213> Homo sapiens

<400> 5593

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<210> 5594
 <211> 296
 <212> PRT
 <213> Homo sapiens

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 Leu Glu His Arg Ala Pro Arg Asp Leu Asp Glu Ser Ser Gly Val Arg
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 His Val Arg Arg Met Phe His Pro Gly Arg Gly Leu Gly Gly Pro Arg
 65 70 75 80
 Ala Arg Arg Ser Asn Met His Phe Thr Ser Ser Ser Thr Gly Gly Leu
 85 90 95
 Ser Ser Ser Gln Ser Ser Tyr Ser Pro Ser Asn Arg Glu Ala Met Asp
 100 105 110
 Pro Ile Ala Glu Leu Leu Ser Gln Leu Ser Gly Val Arg Arg Ser Ala
 115 120 125
 Gly Gly Gln Leu Asn Ser Ser Gly Pro Ser Ala Ser Gln Leu Gln Gln
 130 135 140
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 145 150 155 160
 Gln Gln Leu Glu Thr Ala Arg Asn Ala Thr Arg Arg Thr Asn Thr Ser
 165 170 175
 Ser Val Thr Thr Thr Ile Thr Gln Ser Thr Ala Thr Thr Asn Ile Ala
 180 185 190
 Asn Thr Glu Ser Ser Gln Gln Thr Leu Gln Asn Ser Gln Phe Leu Leu
 195 200 205
 Thr Arg Leu Asn Asp Pro Lys Met Ser Glu Thr Glu Arg Gln Ser Met
 210 215 220
 Glu Ser Glu Arg Ala Asp Arg Ser Leu Phe Val Gln Glu Leu Leu Leu
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 Ser Thr Leu Val Arg Glu Glu Ser Ser Ser Ser Asp Glu Asp Asp Arg
 245 250 255
 Gly Glu Met Ala Asp Phe Gly Ala Met Gly Cys Val Asp Ile Met Pro
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<210> 5595
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 <212> DNA -
 <213> Homo sapiens

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 Gln Leu Gly Thr Ala Gly Gln Gly Phe Ser Tyr Ser Lys Ser Asn Gly
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 Arg Gly Gly Ser Gln Ala Gly Gly Ser Gly Ser Ala Gly Gln Tyr Gly
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 Ser Asp Gln Gln His His Leu Gly Ser Gly Ser Gly Ala Gly Gly Thr
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 Gly Val Gly Glu Thr Gly Ser Gly Asp Gln Ala Gly Gly Glu Gly Lys
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<400> 5598

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<212> DNA

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<212> PRT

<213> Homo sapiens

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Tyr	Phe	Pro	Phe	Met	Asp	Leu	Lys	Leu	Arg	Ala	Ala	Ser	Pro	Ile	Ile
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Val	Phe	Pro	Pro	Phe	Arg	Leu	Met	Pro	Arg	Lys	Val	Thr	Leu	Leu	Ile
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		180						185					190		
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Ser Thr Ile Glu Val Ile Ala Gln Glu Pro Phe Gly Ala Asn Gln Thr
385          390          395          400
Ile Ile Val Ala Val Lys Val Ser Pro Val Ser Tyr Leu Arg Val Ser
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Met Ser Pro Val Leu His Thr Gln Asn Lys Glu Ala Leu Val Ala Val
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Cys Leu Ala Thr Val Leu Thr Ser Leu Glu Gly Leu Ser Gly Thr Trp
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805	810	815
Val Thr Val Ala Phe Val Met Asp Arg Arg Gly Pro Gly Pro Tyr Gly		
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Ala Ser Leu Phe Gln His Phe Leu Asp Ser Tyr Gln Val Met Phe Phe		
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Thr Leu Phe Ala Leu Leu Ala Gly Thr Ala Val Met Ile Ile Ala Tyr		
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<210> 5602
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 <212> PRT
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 35 40 45
 Gly Gly Val Ile Glu Glu Leu Ser Cys Val Arg Ser Asn Asn Tyr Val
 50 55 60
 Gln Glu Pro Glu Cys Arg Arg Asn Leu Val Gln Cys Leu Leu Glu Lys
 65 70 75 80
 Gln Gly Thr Pro Val Val Gln Gly Ser Leu Glu Leu Glu Arg Val Met
 85 90 95
 Ser Ser Leu Leu Asp Met Gly Phe Ser Asn Ala His Ile Asn Glu Leu
 100 105 110
 Leu Ser Val Arg Arg Gly Ala Ser Leu Gln Gln Leu Leu Asp Ile Ile
 115 120 125
 Ser Glu Phe Ile Leu Leu Gly Leu Asn Pro Glu Pro Val Cys Val Val
 130 135 140
 Leu Lys Lys Ser Pro Gln Leu Leu Lys Leu Pro Ile Met Gln Met Arg
 145 150 155 160
 Lys Arg Ser Ser Tyr Leu Gln Lys Leu Gly Leu Gly Glu Gly Lys Leu
 165 170 175
 Lys Arg Val Leu Tyr Cys Cys Pro Glu Ile Phe Thr Met Arg Gln Gln
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<211> 153

<212> PRT

<213> Homo sapiens

<400> 5610

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			20					25					30		
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	50				55					60					
Ile	Pro	Gln	Cys	Gly	Asn	Gly	Pro	Leu	Arg	Leu	Val	Leu	Arg	Val	Pro
65					70				75					80	
Gly	Ala	Gln	Ser	Trp	Val	Gly	Gly	Cys	Trp	Trp	Glu	Val	Arg	Asn	Lys
			85					90					95		
Phe	Trp	Leu	Pro	Ser	Gly	Gln	Leu	Pro	Thr	Ala	Leu	Thr	Trp	Glu	Val
		100					105						110		
Asp	Ala	His	Arg	Gln	Asp	Ala	Leu	Gly	Tyr	Cys	Cys	Thr	Val	Leu	His
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<210> 5611

<211> 1152

<212> DNA

<213> Homo sapiens

<400> 5611

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 840
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 1020
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<210> 5612

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5612

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 35 40 45
 Trp Val Arg Asp Ser Cys Arg Lys Leu Ser Gly Leu Leu Arg Gln Lys
 50 55 60
 Asn Ala Val Leu Asn Lys Leu Lys Thr Ala Ile Gly Ala Val Glu Lys
 65 70 75 80
 Asp Val Gly Leu Ser Asp Glu Glu Lys Leu Phe Gln Val His Thr Phe

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100					105					110									
Ala	Val	Tyr	Gly	Leu	Gln	Arg	Ala	Leu	Gln	Gly	Asp	Tyr	Lys	Asp	Val				
115					120					125									
Val	Asn	Met	Lys	Glu	Ser	Ser	Arg	Gln	Arg	Leu	Glu	Ala	Leu	Arg	Glu				
130					135					140									
Ala	Ala	Ile	Lys	Glu	Glu	Thr	Glu	Tyr	Met	Glu	Leu	Leu	Ala	Ala	Glu				
145					150					155									
Lys	His	Gln	Val	Glu	Ala	Leu	Lys	Asn	Met	Gln	His	Gln	Asn	Gln	Ser				
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195					200					205									
Val	Lys	Gly	Val	Asn	Phe	Glu	Ala	Val	Leu	Arg	Val	Glu	Glu	Glu	Glu				
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Ala	Asn	Ser	Lys	Gln	Asn	Ile	Thr	Lys	Arg	Glu	Val	Glu	Asp	Asp	Leu				
225					230					235									
Val	Leu	Ser	Met	Leu	Ile	Asp	Ser	Gln	Asn	Asn	Gln	Tyr	Ile	Leu	Thr				
245					250					255									
Lys	Pro	Arg	Asp	Ser	Thr	Ile	Pro	Arg	Ala	Asp	His	His	Phe	Ile	Lys				
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Asp	Ile	Val	Thr	Ile	Gly	Met	Leu	Ser	Leu	Pro	Cys	Gly	Trp	Arg	Cys				
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<212> DNA
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420
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480
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540
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600
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 720
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<211> 242

<212> PRT

<213> Homo sapiens

<400> 5614

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Ser	Leu	Ala	Ala	Ala	Glu	Leu	Ala	Ala	Gln	Lys	Arg	Glu	Gln	Arg	
		20					25					30			
Leu	Arg	Lys	Phe	Arg	Glu	Leu	His	Leu	Met	Arg	Asn	Glu	Ala	Arg	Lys
		35				40					45				
Leu	Asn	His	Gln	Glu	Val	Val	Glu	Glu	Asp	Lys	Arg	Leu	Lys	Leu	Pro
	50				55					60					
Ala	Asn	Trp	Glu	Ala	Lys	Lys	Ala	Arg	Leu	Glu	Trp	Glu	Leu	Lys	Glu
65			70					75					80		
Glu	Glu	Lys	Lys	Lys	Glu	Cys	Ala	Ala	Arg	Gly	Glu	Asp	Tyr	Glu	Lys

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<211> 507

<212> PRT

<213> Homo sapiens

<400> 5616

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			20					25					30		
Gln	Gln	Gln	Gln	Gln	Gly	Val	Leu	Pro	Gln	Thr	Val	Pro	Ser	Gln	Pro
			35				40					45			
Ser	Ser	Ser	Thr	Val	Pro	Pro	Pro	His	Arg	Pro	Leu	Tyr	Gln	Pro	
			50			55				60					
Met	Gln	Pro	His	Pro	Gln	His	Leu	Ala	Ser	Met	Gly	Phe	Asp	Pro	Arg
65					70				75					80	
Trp	Leu	Met	Met	Gln	Ser	Tyr	Met	Asp	Pro	Arg	Met	Met	Ser	Gly	Arg
			85					90					95		
Pro	Ala	Met	Asp	Ile	Pro	Pro	Ile	His	Pro	Gly	Met	Ile	Pro	Pro	Lys
			100					105				110			
Pro	Leu	Met	Arg	Arg	Asp	Gln	Met	Glu	Gly	Ser	Pro	Asn	Ser	Ser	Glu
			115				120				125				
Ser	Phe	Glu	His	Ile	Ala	Arg	Ser	Ala	Arg	Asp	His	Ala	Ile	Ser	Leu
130					135						140				
Ser	Glu	Pro	Arg	Met	Leu	Trp	Gly	Ser	Asp	Pro	Tyr	Pro	His	Ala	Glu
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Glu Ser Ser Glu Ala Gln Val Gln Lys Phe Leu Ser Arg Ser Val Glu
      210      215      220
Asp Val Arg Pro His His Thr Asp Ala Asn Asn Gln Ser Ala Cys Phe
225      230      235      240
Glu Ala Pro Asp Gln Lys Thr Leu Ser Thr Pro Gln Glu Glu Arg Ile
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Ser Ala Val Glu Ser Gln Pro Ser Arg Lys Arg Ser Val Ser His Gly
      260      265      270
Ser Asn His Thr Gln Lys Pro Asp Glu Gln Arg Ser Glu Pro Ser Ala
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Gly Ile Pro Lys Val Thr Ser Arg Cys Ile Asp Ser Lys Glu Pro Ile
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Glu Arg Pro Glu Glu Lys Pro Lys Lys Glu Gly Phe Ile Arg Ser Ser
305      310      315      320
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Trp Gly Pro Arg Pro Ser Ser Asn Arg Arg Glu Glu Val Asn Asp Arg
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Pro Val Arg Arg Ser Gly Pro Ile Lys Lys Pro Val Leu Arg Asp Met
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Lys Glu Glu Arg Glu Gln Arg Lys Glu Lys Glu Gly Glu Lys Ala Glu
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Lys Val Thr Glu Lys Val Val Val Lys Pro Glu Lys Thr Glu Lys Lys
385      390      395      400
Asp Leu Pro Pro Pro Pro Pro Pro Gln Pro Pro Ala Pro Ile Gln
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Pro Gln Ser Val Pro Pro Pro Ile Gln Pro Glu Ala Glu Lys Phe Pro
      420      425      430
Ser Thr Glu Thr Ala Thr Leu Ala Gln Lys Pro Ser Gln Asp Thr Glu
      435      440      445
Lys Pro Leu Glu Pro Val Ser Thr Val Gln Val Glu Pro Ala Val Lys
      450      455      460
Thr Val Asn Gln Gln Thr Met Ala Ala Pro Val Val Lys Glu Lys Glu
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<210> 5617

<211> 3480

<212> DNA

<213> Homo sapiens

<400> 5617

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3180
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3300
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3360

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<210> 5618

<211> 1003

<212> PRT

<213> Homo sapiens

<400> 5618

His	Lys	Asp	Ser	Ile	Ser	Leu	Phe	Met	Ala	His	Val	His	Thr	Thr	Val
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Asn	Glu	Met	Ser	Thr	Arg	Tyr	Tyr	Gln	Asn	Glu	Arg	Arg	His	Asn	Tyr
			20					25					30		
Thr	Thr	Pro	Lys	Ser	Phe	Leu	Glu	Gln	Ile	Ser	Leu	Phe	Lys	Asn	Leu
			35				40					45			
Leu	Lys	Lys	Lys	Gln	Asn	Glu	Val	Ser	Glu	Lys	Lys	Glu	Arg	Leu	Val
			50			55					60				
Asn	Gly	Ile	Gln	Lys	Leu	Lys	Thr	Thr	Ala	Ser	Gln	Val	Gly	Asp	Leu
65					70					75					80
Lys	Ala	Arg	Leu	Ala	Ser	Gln	Glu	Ala	Glu	Leu	Gln	Leu	Arg	Asn	His
				85					90					95	
Asp	Ala	Glu	Ala	Leu	Ile	Thr	Lys	Ile	Gly	Leu	Gln	Thr	Glu	Lys	Val
			100					105					110		
Ser	Arg	Glu	Lys	Thr	Ile	Ala	Asp	Ala	Glu	Glu	Arg	Lys	Val	Thr	Ala
			115				120						125		
Ile	Gln	Thr	Glu	Val	Phe	Gln	Lys	Gln	Arg	Glu	Cys	Glu	Ala	Asp	Leu
			130				135				140				
Leu	Lys	Ala	Glu	Pro	Ala	Leu	Val	Ala	Ala	Thr	Ala	Ala	Leu	Asn	Thr
145					150					155					160
Leu	Asn	Arg	Val	Asn	Leu	Ser	Glu	Leu	Lys	Ala	Phe	Pro	Asn	Pro	Pro
				165						170				175	
Ile	Ala	Val	Thr	Asn	Val	Thr	Ala	Ala	Val	Met	Val	Leu	Leu	Ala	Pro
			180					185					190		
Arg	Gly	Arg	Val	Pro	Lys	Asp	Arg	Ser	Trp	Lys	Ala	Ala	Lys	Val	Phe
			195				200					205			
Met	Gly	Lys	Val	Asp	Asp	Phe	Leu	Gln	Ala	Leu	Ile	Asn	Tyr	Asp	Lys
			210			215					220				
Glu	His	Ile	Pro	Glu	Asn	Cys	Leu	Lys	Val	Val	Asn	Glu	His	Tyr	Leu
225					230					235					240
Lys	Asp	Pro	Glu	Phe	Asn	Pro	Asn	Leu	Ile	Arg	Thr	Lys	Ser	Phe	Ala
				245						250				255	
Ala	Ala	Gly	Leu	Cys	Ala	Trp	Val	Ile	Asn	Ile	Ile	Lys	Phe	Tyr	Glu
			260					265					270		
Val	Tyr	Cys	Asp	Val	Glu	Pro	Lys	Arg	Gln	Ala	Leu	Ala	Gln	Ala	Asn
			275					280				285			
Leu	Glu	Leu	Ala	Ala	Ala	Thr	Glu	Lys	Leu	Glu	Ala	Ile	Arg	Lys	Lys
			290			295					300				
Leu	Val	Val	Ser	Ala	Asn	Tyr	Asp	Ile	Glu	Lys	Ser	Glu	Lys	Ile	Arg
305					310					315					320
Trp	Gly	Gln	Ser	Ile	Lys	Ser	Phe	Glu	Ala	Gln	Glu	Lys	Thr	Leu	Cys
				325					330					335	
Gly	Asp	Val	Leu	Leu	Thr	Ala	Ala	Phe	Val	Ser	Tyr	Val	Gly	Pro	Phe

			340						345						350			
Thr	Arg	Gln	Tyr	Arg	Gln	Glu	Leu	Val	His	Cys	Lys	Trp	Val	Pro	Phe			
		355					360					365						
Leu	Gln	Gln	Lys	Val	Ser	Ile	Pro	Leu	Thr	Glu	Gly	Leu	Asp	Leu	Ile			
	370					375				380								
Ser	Met	Leu	Thr	Asp	Asp	Ala	Thr	Ile	Ala	Ala	Trp	Asn	Asn	Glu	Gly			
385				390					395						400			
Leu	Pro	Ser	Asp	Arg	Met	Ser	Thr	Glu	Asn	Ala	Ala	Ile	Leu	Thr	His			
			405					410					415					
Cys	Glu	Arg	Trp	Pro	Leu	Val	Ile	Asp	Pro	Gln	Gln	Gln	Gly	Ile	Lys			
		420					425					430						
Trp	Ile	Lys	Asn	Lys	Tyr	Gly	Met	Asp	Leu	Lys	Val	Thr	His	Leu	Gly			
	435					440				445								
Gln	Lys	Gly	Phe	Leu	Asn	Ala	Ile	Glu	Thr	Ala	Leu	Ala	Phe	Gly	Asp			
	450				455				460									
Val	Ile	Leu	Ile	Glu	Asn	Leu	Glu	Glu	Thr	Ile	Asp	Pro	Val	Leu	Asp			
465				470					475					480				
Pro	Leu	Leu	Gly	Arg	Asn	Thr	Ile	Lys	Lys	Gly	Lys	Tyr	Ile	Arg	Ile			
		485					490					495						
Gly	Asp	Lys	Glu	Cys	Glu	Phe	Asn	Lys	Asn	Phe	Arg	Leu	Ile	Leu	His			
		500					505					510						
Thr	Lys	Leu	Ala	Asn	Pro	His	Tyr	Lys	Pro	Glu	Leu	Gln	Ala	Gln	Thr			
	515					520				525								
Thr	Leu	Leu	Asn	Phe	Thr	Val	Thr	Glu	Asp	Gly	Leu	Glu	Ala	Gln	Leu			
	530				535				540									
Leu	Ala	Glu	Val	Val	Ser	Ile	Glu	Arg	Pro	Asp	Leu	Glu	Lys	Leu	Lys			
545				550					555					560				
Leu	Val	Leu	Thr	Lys	His	Gln	Asn	Asp	Phe	Lys	Ile	Glu	Leu	Lys	Tyr			
		565					570					575						
Leu	Glu	Asp	Asp	Leu	Leu	Leu	Arg	Leu	Ser	Ala	Ala	Glu	Gly	Ser	Phe			
		580					585					590						
Leu	Asp	Asp	Thr	Lys	Leu	Val	Glu	Arg	Leu	Glu	Ala	Thr	Lys	Thr	Thr			
	595					600				605								
Val	Ala	Glu	Ile	Glu	His	Lys	Val	Ile	Glu	Ala	Lys	Glu	Asn	Glu	Arg			
	610				615				620									
Lys	Ile	Asn	Glu	Ala	Arg	Glu	Cys	Tyr	Arg	Pro	Val	Ala	Ala	Arg	Ala			
625				630					635					640				
Ser	Leu	Leu	Tyr	Phe	Val	Ile	Asn	Asp	Leu	Gln	Lys	Ile	Asn	Pro	Leu			
		645					650					655						
Tyr	Gln	Phe	Ser	Leu	Lys	Ala	Phe	Asn	Val	Leu	Phe	His	Arg	Ala	Ile			
	660					665				670								
Glu	Gln	Ala	Asp	Lys	Val	Glu	Asp	Met	Gln	Gly	Arg	Ile	Ser	Ile	Leu			
	675					680				685								
Met	Glu	Ser	Ile	Thr	His	Ala	Val	Phe	Leu	Tyr	Thr	Ser	Gln	Ala	Leu			
	690				695				700									
Phe	Glu	Lys	Asp	Lys	Leu	Thr	Phe	Leu	Ser	Gln	Met</							

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      770              775              780
Trp Val Glu Ser Glu Cys Pro Glu Lys Glu Lys Leu Pro Gln Glu Trp
785              790              795              800
Lys Lys Lys Ser Leu Ile Gln Lys Leu Ile Leu Leu Arg Ala Met Arg
      805              810              815
Pro Asp Arg Met Thr Tyr Ala Leu Arg Asn Phe Val Glu Glu Lys Leu
      820              825              830
Gly Ala Lys Tyr Val Glu Arg Thr Arg Leu Asp Leu Val Lys Ala Phe
      835              840              845
Glu Glu Ser Ser Pro Ala Thr Pro Ile Phe Phe Ile Leu Ser Pro Gly
      850              855              860
Val Asp Ala Leu Lys Asp Leu Glu Ile Leu Gly Lys Arg Leu Gly Phe
865              870              875              880
Thr Ile Asp Ser Gly Lys Phe His Asn Val Ser Leu Gly Gln Gly Gln
      885              890              895
Glu Thr Val Ala Glu Val Ala Leu Glu Lys Ala Ser Lys Gly Gly His
      900              905              910
Trp Val Ile Leu Gln Asn Val His Leu Val Ala Lys Trp Leu Gly Thr
      915              920              925
Leu Glu Lys Leu Leu Glu Arg Phe Ser Gln Gly Ser His Arg Asp Tyr
      930              935              940
Arg Val Phe Met Ser Ala Glu Ser Ala Pro Thr Pro Asp Glu His Ile
945              950              955              960
Ile Pro Gln Gly Leu Leu Glu Asn Ser Ile Lys Ile Thr Asn Glu Pro
      965              970              975
Pro Thr Gly Met Leu Ala Asn Leu His Ala Ala Leu Tyr Asn Phe Asp
      980              985              990
Gln Val Arg Lys Arg Ser Arg Leu Gly Arg Gln
      995              1000

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<210> 5619
 <211> 1219
 <212> DNA
 <213> Homo sapiens

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<400> 5619
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120
cagtgtgcca gctgctagaa aacagggaag atattagcca atatggaatt gccaggttct
180
tcactgaata ttttaacagt gtatgccagg gaacacacat tctctttcga gaattcagct
240
tcgtccaagc cccccccac aatagggtat catttttacg ggccttctgg agatgcttcc
300
gaactgtggg caaaaatggc gatttgctga ccatgaaaga atatcactgt ttgctgcaat
360
taactgtgtc tgatttcccg ctggagctca ctcagaaagc agccaggatt gtgctcatgg
420
acgatgccat ggactgcttg atgtcttttt cagatttcct ctttgcttc cagatccagt
480
tttactactc agaattcttg gacagtgtgg ctgccatcta tgaggacctg ctgtcaggca
540

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agaaccctaa cacagtgatt gtgccgacgt cgtccagtgg gcagcaccgc caacgacctg
 600
 ccttggggcg ggccggcacg ctggagggcg tggagggctc gctgttctac cagtgtctgg
 660
 aaaacctgtg tgatcggcac aagtacagct gcccaccccc agcaattgtc aaagaggccc
 720
 tcagcaatgt tcagagactg accttctatg gattctcat ggctctctca aagcaccgtg
 780
 gaatcaacca agccctcggg aagtcagagc taagcagccg tcagcctctc ctgccgcaca
 840
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 900
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 960
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 1020
 aacatgaaac cacctcccac tagcagaagc gcccagcccc tcctcagaga accccagctc
 1080
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<210> 5620

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5620

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Gln	Arg	His	Val	Leu	Thr	Tyr	Met	Glu	Asp	Ala	Val	Cys	Gln	Leu	Leu
			20					25					30		
Glu	Asn	Arg	Glu	Asp	Ile	Ser	Gln	Tyr	Gly	Ile	Ala	Arg	Phe	Phe	Thr
	35						40					45			
Glu	Tyr	Phe	Asn	Ser	Val	Cys	Gln	Gly	Thr	His	Ile	Leu	Phe	Arg	Glu
	50					55					60				
Phe	Ser	Phe	Val	Gln	Ala	Thr	Pro	His	Asn	Arg	Val	Ser	Phe	Leu	Arg
65				70					75					80	
Ala	Phe	Trp	Arg	Cys	Phe	Arg	Thr	Val	Gly	Lys	Asn	Gly	Asp	Leu	Leu
			85					90					95		
Thr	Met	Lys	Glu	Tyr	His	Cys	Leu	Leu	Gln	Leu	Leu	Cys	Pro	Asp	Phe
			100					105					110		
Pro	Leu	Glu	Leu	Thr	Gln	Lys	Ala	Ala	Arg	Ile	Val	Leu	Met	Asp	Asp
	115						120					125			
Ala	Met	Asp	Cys	Leu	Met	Ser	Phe	Ser	Asp	Phe	Leu	Phe	Ala	Phe	Gln
	130					135					140				
Ile	Gln	Phe	Tyr	Tyr	Ser	Glu	Phe	Leu	Asp	Ser	Val	Ala	Ala	Ile	Tyr
145				150					155					160	
Glu	Asp	Leu	Leu	Ser	Gly	Lys	Asn	Pro	Asn	Thr	Val	Ile	Val	Pro	Thr
			165				170						175		
Ser	Ser	Ser	Gly	Gln	His	Arg	Gln	Arg	Pro	Ala	Leu	Gly	Gly	Ala	Gly

				180					185					190			
Thr	Leu	Glu	Gly	Val	Glu	Ala	Ser	Leu	Phe	Tyr	Gln	Cys	Leu	Glu	Asn		
		195						200				205					
Leu	Cys	Asp	Arg	His	Lys	Tyr	Ser	Cys	Pro	Pro	Pro	Ala	Leu	Val	Lys		
	210					215					220						
Glu	Ala	Leu	Ser	Asn	Val	Gln	Arg	Leu	Thr	Phe	Tyr	Gly	Phe	Leu	Met		
225					230					235					240		
Ala	Leu	Ser	Lys	His	Arg	Gly	Ile	Asn	Gln	Ala	Leu	Gly	Lys	Ser	Glu		
				245					250						255		
Leu	Ser	Ser	Arg	Gln	Pro	Leu	Leu	Pro	His	Asn	Thr	Gly	Ser	Ser	Trp		
			260					265					270				
Pro	Leu	Leu	Ala	Thr	Arg	Leu	Gln	Arg	Gly	Arg	Gly	Ile	Thr	Ile	Ser		
	275						280					285					
Ala	Leu	Thr	Ser	Gln	Gly	Arg	Thr	Gln	Ser	Gln	Gly	Ala	Gly	Ile	Trp		
	290					295					300						
Arg	Gln	Asn	Met	Ala	Leu	Thr	His	Ser	His	Gly	Arg	Gly	Gln	Pro	Ser		
305					310					315					320		
Leu	Pro	Ala	Ala	Leu	Pro	Gln	His	Glu	Thr	Thr	Ser	Pro					
				325					330								

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<210> 5621
<211> 456
<212> DNA
<213> Homo sapiens
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<400> 5621
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gccggccggg ctcacatggg ttgtacaata aatacatctg tggggcgggc tctccgcagc
120
cgggaagggc caccgccacg gttcagtcga gcttccgggc tcccagcttc atggggccct
180
tgggcacctt cctctcggcg cgtttggcct ccatctcccg ccgcgcgtcc tcgcgtttct
240
tccgggccag ctcagccttg acctgtcctg ggtgctggga cgtgcagaca gggtagcgaa
300
ggggtcgccc ttgtcgctgg actctggggc accccagtta tactcgctgg ccagccgtgt
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420
gcggagagcc cgccccacag atgtatttat tgtaca
456
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<210> 5622
<211> 82
<212> PRT
<213> Homo sapiens
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<400> 5622
Met Ala Trp Leu Gly Arg Pro Gly Ser His Gly Leu Tyr Asn Lys Tyr
  1                    5                10                15
Ile Cys Gly Ala Gly Ser Pro Gln Pro Gly Arg Ala Thr Ala Thr Val
      20                25                30
Gln Ser Ser Phe Arg Ala Pro Ser Phe Met Gly Pro Leu Ala Thr Phe

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[illegible]

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<210> 5623
<211> 357
<212> DNA
<213> Homo sapiens
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<400> 5623
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120
cggccaatgc ctctgggagc aaggatcctt ttccacggtg tgttctatgc cgggggcttt
180
gccatttgtt attacctcat tcaaaagtgt cattccaggg ctttatatta caagttggca
240
gtggagcagc tgcagagcca tcccaggcca caggaagctc tgggccctcc tctcaacatc
300
cattatctca agctcatcga cagggaaaac ttcgtggaca ttgttgatgc caagttg
357
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<210> 5624
<211> 88
<212> PRT
<213> Homo sapiens
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<400> 5624
Met Trp Gln Lys Tyr Ala Gly Ser Arg Arg Ser Met Pro Leu Gly Ala
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Arg Ile Leu Phe His Gly Val Phe Tyr Ala Gly Gly Phe Ala Ile Val
          20          25          30
Tyr Tyr Leu Ile Gln Lys Phe His Ser Arg Ala Leu Tyr Tyr Lys Leu
          35          40          45
Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
          50          55          60
Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
65          70          75          80
Val Asp Ile Val Asp Ala Lys Leu
          85

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```
<210> 5625
<211> 1017
<212> DNA
<213> Homo sapiens
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<400> 5625
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60
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 120
 cgcacgcagg cccgtacaca cctgcagctg ggctccgttc tctatcacca caccaagaac
 180
 agcgagcagg cgcgcagcca cctggagaag gcgtggttga tatcacagca aatcccacag
 240
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 tccgttgatg cagcaaagcc gctgctgcgg aaggcgatcc agatctcaca gcagacccca
 360
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 420
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 720
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 900
 aagctcaaga tgctggactg cagccccatc ctgtcatcct tccaagtgat cctgctggag
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<210> 5626

<211> 339

<212> PRT

<213> Homo sapiens

<400> 5626

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1				5					10					15	
Thr	Ser	Ser	Pro	Pro	Lys	Ile	Arg	Leu	Cys	Val	His	Cys	Leu	Gln	Ala
			20					25					30		
Val	Phe	Pro	Phe	Lys	Pro	Pro	Gln	Arg	Ile	Glu	Ala	Arg	Thr	His	Leu
		35					40				45				
Gln	Leu	Gly	Ser	Val	Leu	Tyr	His	His	Thr	Lys	Asn	Ser	Glu	Gln	Ala
	50					55				60					
Arg	Ser	His	Leu	Glu	Lys	Ala	Trp	Leu	Ile	Ser	Gln	Gln	Ile	Pro	Gln
65					70				75				80		
Phe	Glu	Asp	Val	Lys	Phe	Glu	Ala	Ala	Ser	Leu	Leu	Ser	Glu	Leu	Tyr
			85					90					95		
Cys	Gln	Glu	Asn	Ser	Val	Asp	Ala	Ala	Lys	Pro	Leu	Leu	Arg	Lys	Ala
			100					105					110		
Ile	Gln	Ile	Ser	Gln	Gln	Thr	Pro	Tyr	Trp	His	Cys	Arg	Leu	Leu	Phe

115 120 125
 Gln Leu Ala Gln Leu His Thr Leu Glu Lys Asp Leu Val Ser Ala Cys
 130 135 140
 Asp Leu Leu Gly Val Gly Ala Glu Tyr Ala Arg Val Val Gly Ser Glu
 145 150 155 160
 Tyr Thr Arg Ala Leu Phe Leu Leu Ser Lys Gly Met Leu Leu Leu Met
 165 170 175
 Glu Arg Lys Leu Gln Glu Val His Pro Leu Leu Thr Leu Cys Gly Gln
 180 185 190
 Ile Val Glu Asn Trp Gln Gly Asn Pro Ile Gln Lys Glu Ser Leu Arg
 195 200 205
 Val Phe Phe Leu Val Leu Gln Val Thr His Tyr Leu Asp Ala Gly Gln
 210 215 220
 Val Lys Ser Val Lys Pro Cys Leu Lys Gln Leu Gln Gln Cys Ile Gln
 225 230 235 240
 Thr Ile Ser Thr Leu His Asp Asp Glu Ile Leu Pro Ser Asn Pro Ala
 245 250 255
 Asp Leu Phe His Trp Leu Pro Lys Glu His Met Cys Val Leu Val Tyr
 260 265 270
 Leu Val Thr Val Met His Ser Met Gln Ala Gly Tyr Leu Glu Lys Ala
 275 280 285
 Gln Lys Tyr Thr Asp Lys Ala Leu Met Gln Leu Glu Lys Leu Lys Met
 290 295 300
 Leu Asp Cys Ser Pro Ile Leu Ser Ser Phe Gln Val Ile Leu Leu Glu
 305 310 315 320
 His Ile Ile Met Cys Arg Leu Val Thr Gly His Lys Ala Thr Ala Leu
 325 330 335
 Gln Glu Ile

<210> 5627
 <211> 1401
 <212> DNA
 <213> Homo sapiens

<400> 5627
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 cagcgagggg cagcagctgg cccaacccgg aggcagagcg gcaactgaac tctagccgga
 120
 aagagccagg gttatgtgca catgggaggt ggggaggaca ggggctgtat gtgacctca
 180
 catctgttcc tcgcgcccc gatggcttct gctgcctgct ccatggacct catcgacagc
 240
 tttgagctcc tggatctcct gtttgaccgg caggacggca tcttgagaca cgtggagctg
 300
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 360
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 720
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 780
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 840
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 960
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 1200
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<210> 5628

<211> 299

<212> PRT

<213> Homo sapiens

<400> 5628

Met	Ala	Ser	Ala	Ala	Cys	Ser	Met	Asp	Pro	Ile	Asp	Ser	Phe	Glu	Leu
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Leu	Asp	Leu	Leu	Phe	Asp	Arg	Gln	Asp	Gly	Ile	Leu	Arg	His	Val	Glu
			20					25					30		
Leu	Gly	Glu	Gly	Trp	Gly	His	Val	Lys	Asp	Gln	Val	Leu	Pro	Asn	Pro
		35					40					45			
Asp	Ser	Asp	Asp	Phe	Leu	Ser	Ser	Ile	Leu	Gly	Ser	Gly	Asp	Ser	Leu
	50					55					60				
Pro	Ser	Ser	Pro	Leu	Trp	Ser	Pro	Glu	Gly	Ser	Asp	Ser	Gly	Ile	Ser
65				70				75					80		
Glu	Asp	Leu	Pro	Ser	Asp	Pro	Gln	Asp	Thr	Pro	Pro	Arg	Ser	Gly	Pro
			85					90					95		
Ala	Thr	Ser	Pro	Ala	Gly	Cys	His	Pro	Ala	Gln	Pro	Gly	Lys	Gly	Pro
			100					105					110		
Cys	Leu	Ser	Tyr	His	Pro	Gly	Asn	Ser	Cys	Ser	Thr	Thr	Thr	Pro	Gly
		115				120					125				
Pro	Val	Ile	Gln	Gln	Gln	His	His	Leu	Gly	Ala	Ser	Tyr	Leu	Leu	Arg

```

      130              135              140
Pro Gly Ala Gly His Cys Gln Glu Leu Val Leu Thr Glu Asp Glu Lys
145              150              155              160
Lys Leu Leu Ala Lys Glu Gly Ile Thr Leu Pro Thr Gln Leu Pro Leu
      165              170              175
Thr Lys Tyr Glu Glu Arg Val Leu Lys Lys Ile Arg Arg Lys Ile Arg
      180              185              190
Asn Lys Gln Ser Ala Gln Glu Ser Arg Lys Lys Lys Lys Glu Tyr Ile
      195              200              205
Asp Gly Leu Glu Thr Arg Ser Cys Cys Cys Pro Leu Pro Ser Ser Ser
      210              215              220
Ser Pro Pro Ser Ala Leu Leu Ala Pro Thr Lys Pro Arg Ala Leu Gly
225              230              235              240
Thr Leu Arg Leu Tyr Glu Cys Ser Pro Glu Leu Cys Thr Thr Met Leu
      245              250              255
Pro Pro Ala Trp Leu Leu Met Leu Cys Gln Ala Pro Arg Pro Gln Asp
      260              265              270
Pro Asp Pro Arg Leu Thr Gln Pro Glu Lys Ser Leu Gln Glu Ala Pro
      275              280              285
Gly Gln Thr Gly Ala Ser Arg Thr Pro Arg Thr
      290              295

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<210> 5629

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5629

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120
agccatcagg ggcagngctg ctattcaggt ctgggactgt gggactccag agcccatggt
180
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240
tgtgttggga ggcgtggggg ggcagctgga agaattggaga ggcataattg tggaggatct
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420
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428

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<210> 5630

<211> 110

<212> PRT

<213> Homo sapiens

<400> 5630

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Met Asp Gly Arg His Thr Gln Ser Pro Leu Thr Glu Asp Lys Ala Gly
1          5          10          15
Ala Tyr Arg Glu Cys Thr Thr Trp Pro Arg Ala His Gln Leu Ala Ile

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			20					25				30				
Arg	Gly	Xaa	Ala	Ala	Ile	Gln	Val	Trp	Asp	Cys	Gly	Thr	Pro	Glu	Pro	
		35					40					45				
Met	Phe		Thr	Arg	Met	Pro	Tyr	Cys	His	Asn	Gly	Trp	Cys	Leu	Tyr	
	50					55					60					
Leu	Leu	Ile	Tyr	Asp	Cys	Val	Leu	Gly	Gly	Val	Gly	Trp	Gln	Leu	Glu	
65					70					75					80	
Glu	Trp	Arg	Gly	Ile	Phe	Val	Glu	Asp	Leu	Pro	Pro	Phe	Ser	Ala	Thr	
			85						90					95		
Leu	Ser	Trp	Ser	Ser	Gln	Phe	His	Leu	Arg	Asn	Tyr	Leu	Leu			
			100					105					110			

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<210> 5631
<211> 783
<212> DNA
<213> Homo sapiens
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120
ctttttatta cgagtgaaca gatgaactaa ggtaagcggg tctcagcctt ccgctgggtg
180
agcatctcca cgcagggcct cagccccgtc ctggccttgc ctgaggactg caccatgggt
240
gttctctggg catggaggag gcagcaggaa ggggtgacag gagcaggagc aggtgcaggg
300
cacctcacac cacaggcctc cccacctct gagctgccaa cagccaagac tcttggcgag
360
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420
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480
gccagcagca cccgagggag ggcaggggct gcacagagac cagagaaagg aaaacccac
540
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600
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660
ccgtctgcgt ctgtgcctgt gcagcccaca ccagtgcagc ccggggccct ctcagacctc
720
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780
gtc
783

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<210> 5632
<211> 183
<212> PRT
<213> Homo sapiens
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<400> 5632
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Ala Gly Ala Gly Ala Gly His Leu Thr Pro Gln Ala Ser Pro Thr Ser
20           25           30
Glu Leu Pro Thr Ala Lys Thr Pro Gly Glu Ala Gly Arg Gly Gly Val
35           40           45
Arg Gly Lys Glu Gly Leu Cys Glu Ser Lys Pro His Pro Gln Ser Arg
50           55           60
Ala Glu Thr Gln Val Cys Lys Ser His Pro Pro Thr Ser Ser Ser
65           70           75           80
Phe Glu Ala Ser Ser Thr Arg Gly Arg Ala Gly Ala Ala Gln Arg Pro
85           90           95
Glu Lys Gly Lys Pro His Arg Arg Lys Leu Lys Ala Ser Val Pro Cys
100          105          110
Val Ser Ala Glu Arg Val Asn Gly Pro Lys Gly Ser Ser Leu Gln Thr
115          120          125
Ala Arg Ile His Pro Thr Gly Gly His Arg Thr Arg Pro Gly Pro Ser
130          135          140
Ala Ser Val Pro Val Gln Pro Thr Pro Val Gln Pro Gly Ala Leu Ser
145          150          155          160
Asp Leu Thr Thr Arg Val Pro Ser Thr Cys Val His Thr Gln Met Gln
165          170          175
Glu Arg Thr His Thr Thr Val
180

```

<210> 5633

<211> 2181

<212> DNA

<213> Homo sapiens

<400> 5633

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tgtcacctcc gtgtccacaca tagatgccag gctctgcttc tgtggttctg gaggtcatta
120
gtcaattgta tgtggtgctg tctgtctctc tgattgcaga ggaggaagga accccttaaa
180
tgagcgggtt ctgagtgtg gggccgctgg tctgctctgc ctggtgggat tctccagtgc
240
tggtttcatc tgtgccccag cccactctc accaacaagg agggcgtgaa aatgacaagg
300
aatccatccc tagagttcac aggagatcta gggcagagtt tccaagctgc agctgctctg
360
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420
tgggtttgga ggctccaca tcaggaatt gagcggtagg ggtttcagcc ttcacgttgg
480
tcgcccact gtatgggaag tgggtctggt ggtctgcttg ccagttctca ccgtcctctt
540
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600
ctggtggtca tcgagggcat gggccgtgct gtccacacaa actaccacgc agccctgcgc
660
tgcgagagcc tcaagctggc cgtcatcaag aacgcgtggc tggccgagcg gctgggcggc
720

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cggtctttca gcgccatctt caagtacgag gtcccagccg agtgaggcgc tgcagctgcc
780
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960
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2160
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2181

<210> 5634

<211> 289

<212> PRT

<213> Homo sapiens

<400> 5634

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 20           25           30
Phe Asn Phe Pro Asp Pro Tyr Ser Lys Val Lys Gln Arg Glu Asn Gly
 35           40           45
Val Ala Leu Arg Cys Phe Pro Gly Val Val Arg Ser Leu Asp Ala Leu
 50           55           60
Gly Trp Glu Glu Arg Gln Leu Ala Leu Val Lys Gly Leu Leu Ala Gly
 65           70           75           80
Asn Val Phe Asp Trp Gly Ala Lys Ala Val Ser Ala Val Leu Glu Ser
 85           90           95
Asp Pro Tyr Phe Gly Phe Glu Glu Ala Lys Arg Lys Leu Gln Glu Arg
100          105          110
Pro Trp Leu Val Asp Ser Tyr Ser Glu Trp Leu Gln Arg Leu Lys Gly
115          120          125
Pro Pro His Lys Cys Ala Leu Ile Phe Ala Asp Asn Ser Gly Ile Asp
130          135          140
Ile Ile Leu Gly Val Phe Pro Phe Val Arg Glu Leu Leu Leu Arg Gly
145          150          155          160
Thr Glu Val Ile Leu Ala Cys Asn Ser Gly Pro Ala Leu Asn Asp Val
165          170          175
Thr His Ser Glu Ser Leu Ile Val Ala Glu Arg Ile Ala Gly Met Asp
180          185          190
Pro Val Val His Ser Ala Leu Gln Glu Glu Arg Leu Leu Leu Val Gln
195          200          205
Thr Gly Ser Ser Ser Pro Cys Leu Asp Leu Ser Arg Leu Asp Lys Gly
210          215          220
Leu Ala Ala Leu Val Arg Glu Arg Gly Ala Asp Leu Val Val Ile Glu
225          230          235          240
Gly Met Gly Arg Ala Val His Thr Asn Tyr His Ala Ala Leu Arg Cys
245          250          255
Glu Ser Leu Lys Leu Ala Val Ile Lys Asn Ala Trp Leu Ala Glu Arg
260          265          270
Leu Gly Gly Arg Leu Phe Ser Val Ile Phe Lys Tyr Glu Val Pro Ala
275          280          285
Glu

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<210> 5635

<211> 614

<212> DNA

<213> Homo sapiens

<400> 5635

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120
gcactcatca atggtgatga aaacctggcc tgccaaatat atgaaaacaa tcttcagcta
180

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aaagaatctc ttgatccaaa tacatcttat ggggagccct accagcaciaa tactccatta
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 300
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 360
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 420
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 480
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 614

<210> 5636

<211> 204

<212> PRT

<213> Homo sapiens

<400> 5636

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 20 25 30
 Asn Thr Thr Thr Lys Phe Arg Lys Ala Leu Ile Asn Gly Asp Glu Asn
 35 40 45
 Leu Ala Cys Gln Ile Tyr Glu Asn Asn Pro Gln Leu Lys Glu Ser Leu
 50 55 60
 Asp Pro Asn Thr Ser Tyr Gly Glu Pro Tyr Gln His Asn Thr Pro Leu
 65 70 75 80
 His Tyr Ala Ala Arg His Gly Met Asn Lys Ile Leu Gly Asp Asp Phe
 85 90 95
 Arg Arg Ala Asp Cys Leu Gln Met Ile Leu Lys Trp Lys Gly Ala Lys
 100 105 110
 Leu Asp Gln Gly Glu Tyr Glu Arg Ala Ala Ile Asp Ala Val Asp Asn
 115 120 125
 Lys Lys Asn Thr Pro Leu His Tyr Ala Ala Ala Ser Gly Met Lys Ala
 130 135 140
 Cys Val Glu Lys His Gly Gly Asp Leu Phe Ala Glu Asn Glu Asn Lys
 145 150 155 160
 Asp Thr Pro Cys Asp Cys Ala Glu Lys Gln His His Lys Asp Leu Ala
 165 170 175
 Leu Asn Leu Glu Ser Gln Met Val Phe Ser Arg Asp Pro Glu Ala Glu
 180 185 190
 Glu Ile Glu Ala Glu Tyr Ala Ala Leu Asp Lys Arg
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<210> 5637

<211> 825

<212> DNA

<213> Homo sapiens

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<210> 5638
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 5638
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 20 25 30
 Leu Thr Gly Ala Arg Trp Phe Cys Asp Pro Ser Gln Ala His Ala Pro
 35 40 45
 Leu Ala Gly Arg Leu Ala Arg Ala Pro Leu Trp Leu Ala Cys Gly Asp
 50 55 60
 Thr Trp Ala Leu Leu His Val Pro Thr Arg Ala Val Ala Gly Ser Lys
 65 70 75 80
 Glu Ala Gln Pro Arg Pro Ala Cys Val Asp Pro Ala Gly Leu Arg Ala
 85 90 95
 Pro Glu Leu Leu Thr Val Ser Glu Pro Gly Cys Pro Ala Pro Arg Arg
 100 105 110
 Pro Pro Ser Ser Cys Pro Ala Trp Asp Pro Ser Ala Val Cys Leu Leu
 115 120 125
 Asn Gln Gly Val

130

<210> 5639

<211> 2433

<212> DNA

<213> Homo sapiens

<400> 5639

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120
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180
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240
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300
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 1980
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 tgccactgag gaaacaggtc atgaagggtg agataagctg caaggggcga agcaacttta
 2340
 tgtcagtga aaacgtgtct ctttaaagct gctatgtgaa cagcttttac agtcattaaa
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<210> 5640

<211> 540

<212> PRT

<213> Homo sapiens

<400> 5640

Met	Cys	Pro	Ser	Pro	Glu	Arg	Gln	Glu	Asp	Gly	Ala	Arg	Lys	Asp	Phe
1				5				10						15	
Ser	Ser	Arg	Leu	Ala	Ala	Gly	Pro	Thr	Phe	Gln	His	Phe	Leu	Lys	Ser
		20					25						30		
Ala	Ser	Ala	Pro	Gln	Glu	Lys	Leu	Ser	Ser	Glu	Val	Glu	Asp	Pro	Pro
		35				40						45			
Pro	Tyr	Leu	Met	Met	Asp	Glu	Leu	Leu	Gly	Arg	Gln	Arg	Lys	Val	Tyr
	50				55				60						
Leu	Glu	Thr	Tyr	Gly	Cys	Gln	Met	Asn	Val	Asn	Asp	Thr	Glu	Ile	Ala
65				70				75						80	
Trp	Ser	Ile	Leu	Gln	Lys	Ser	Gly	Tyr	Leu	Arg	Pro	Val	Thr	Ser	Lys

85 90 95
 Ala Asp Val Ile Leu Leu Val Thr Cys Ser Ile Arg Glu Lys Ala Glu
 100 105 110
 Gln Thr Ile Trp Asn Arg Leu His Gln Leu Lys Ala Leu Lys Thr Arg
 115 120 125
 Arg Pro Arg Ser Arg Val Pro Leu Arg Ile Gly Ile Leu Gly Cys Met
 130 135 140
 Ala Glu Arg Leu Lys Glu Glu Ile Leu Asn Arg Glu Lys Met Val Asp
 145 150 155 160
 Ile Leu Ala Gly Pro Asp Ala Tyr Arg Asp Leu Pro Arg Leu Leu Ala
 165 170 175
 Val Ala Glu Ser Gly Gln Gln Ala Ala Asn Val Leu Leu Ser Leu Asp
 180 185 190
 Glu Thr Tyr Ala Asp Val Met Pro Val Gln Thr Ser Ala Ser Ala Thr
 195 200 205
 Ser Ala Phe Val Ser Ile Met Arg Gly Cys Asp Asn Met Cys Ser Tyr
 210 215 220
 Cys Ile Val Pro Phe Thr Arg Gly Arg Glu Arg Ser Arg Pro Ile Ala
 225 230 235 240
 Ser Ile Leu Glu Glu Val Lys Lys Leu Ser Glu Gln Gly Leu Lys Glu
 245 250 255
 Val Thr Leu Leu Gly Gln Asn Val Asn Ser Phe Arg Asp Asn Ser Glu
 260 265 270
 Val Gln Phe Asn Ser Ala Val Pro Thr Asn Leu Ser Arg Gly Phe Thr
 275 280 285
 Thr Asn Tyr Lys Thr Lys Gln Gly Gly Leu Arg Phe Ala His Leu Leu
 290 295 300
 Asp Gln Val Ser Arg Val Asp Pro Glu Met Arg Ile Arg Phe Thr Ser
 305 310 315 320
 Pro His Pro Lys Asp Phe Pro Asp Glu Val Leu Gln Leu Ile His Glu
 325 330 335
 Arg Asp Asn Ile Cys Lys Gln Ile His Leu Pro Ala Gln Ser Gly Ser
 340 345 350
 Ser Arg Val Leu Glu Ala Met Arg Arg Gly Tyr Ser Arg Glu Ala Tyr
 355 360 365
 Val Glu Leu Val His His Ile Arg Glu Ser Ile Pro Gly Val Ser Leu
 370 375 380
 Ser Ser Asp Phe Ile Ala Gly Phe Cys Gly Glu Thr Glu Glu Asp His
 385 390 395 400
 Val Gln Thr Val Ser Leu Leu Arg Glu Val Gln Tyr Asn Met Gly Phe
 405 410 415
 Leu Phe Ala Tyr Ser Met Arg Gln Lys Thr Arg Ala Tyr His Arg Leu
 420 425 430
 Lys Asp Asp Val Pro Glu Glu Val Lys Leu Arg Arg Leu Glu Glu Leu
 435 440 445
 Ile Thr Ile Phe Arg Glu Glu Ala Thr Lys Ala Asn Gln Thr Ser Val
 450 455 460
 Gly Cys Thr Gln Leu Val Leu Val Glu Gly Leu Ser Lys Arg Ser Ala
 465 470 475 480
 Thr Asp Leu Cys Gly Arg Asn Asp Gly Asn Leu Lys Val Ile Phe Pro
 485 490 495
 Asp Ala Glu Met Glu Asp Val Asn Asn Pro Gly Leu Arg Val Arg Ala
 500 505 510
 Gln Pro Gly Asp Tyr Val Leu Val Lys Ile Thr Xaa Gln Pro Val Leu

515 520 525

Arg His Leu Gly Asp Met Phe Ser Ala Gly Pro Leu

530 535 540

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<210> 5641
<211> 293
<212> DNA
<213> Homo sapiens
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<400> 5641
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ttctgtggcc acgcgtccaa aaccaatcag gtcaactcgg gcggtgtgct gctgaggttg
120
caggtagggcg aggaggtgtg gctggctggg gcaccctcgg catcctcgga gagccaggtg
180
aggagggcgag atacaagcag aaattccagt cagtgttcac ggtcactcgg cagaccacc
240
agccccctgc acccaacagc ctgatcagat tcaacgcggg cctcaccaac cgg
293
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```
<210> 5642
<211> 87
<212> PRT
<213> Homo sapiens
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```

<400> 5642
Ala Ser His Thr Ala Asn Leu Cys Val Leu Leu Tyr Arg Ser Gly Val
 1          5          10
Lys Val Val Thr Phe Cys Gly His Ala Ser Lys Thr Asn Gln Val Asn
 20          25          30
Ser Gly Gly Val Leu Leu Arg Leu Gln Val Gly Glu Glu Val Trp Leu
 35          40          45
Ala Gly Ala Pro Leu Ala Ser Leu Glu Ser Gln Val Arg Arg Ala Asp
 50          55          60
Thr Ser Arg Asn Ser Ser Gln Cys Ser Arg Ser Leu Gly Arg Pro Thr
 65          70          75          80
Ser Pro Leu His Pro Thr Ala
 85

```

```
<210> 5643
<211> 1218
<212> DNA
<213> Homo sapiens
```

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<400> 5643
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caaaataaca tggcagccag acgaattaca caggagactt ttgatgctgt attacaagaa
120
aaagccaaac gatatcacat ggatgccagt ggtgaggctg taagcgaaac tcttcagttt
180
aaagctcaag atctcttaag ggcagtccca agatccagag cagagatgta tgatgacgtc
240
```

cacagcgatg gcagatactc cctcagtggg tctgtagctc actctagaga tgccggaaga
 300
 gaaggcctga gaagtgcgtg atttccaggg ccttccttca gatcaagcaa cccttccatc
 360
 agtgatgaca gctacttttcg caaagaatgt ggccggggtc tggaattttc tcaactctgat
 420
 tctcggggacc aggtcatttg ccaccggaaa ttggggcatt tccgtttctc ggactggaaa
 480
 tttgcgctcc gtggttcttg ggaacaagac tttggccatc cagttttctc agagtcctct
 540
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 600
 ctgattgaga aagagtgttt ggagaaggag agtcgggatt atgacgtgga ccatcctggg
 660
 gaggtgact ctgtgcttag gggcagcagt caagtccagg ccagaggctg agctctaacc
 720
 atcgttgacc aggaagggtc cctcctagga aagggggaga ctcagggcct gctcacagct
 780
 aaggggggtg ttgggaaact tgtcacattg agaaatgtga gcacaaaaa aatacccacc
 840
 gtgaatcgta ttactcccaa aactcagggc actaaccaaa tccagaaaaa cactccaagt
 900
 cctgatgtga ccctggggac aaaccaggg acagaagata tccagttccc cattcagaag
 960
 atccctctgg ggctggatct gaagaatctt cggctcccca gaagaaagat gagctttgac
 1020
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 1080
 ttccacacca taaaattaga ttattaaatt tttcccaaac ttttccagac tctctttgaa
 1140
 cttgaaacag aaacctgtgc taaaatgctt gcctcattca aatgttctt aaaaccagag
 1200
 cacagagatt ttgcttt
 1218

<210> 5644

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5644

Trp	Glu	Gln	Asp	Phe	Gly	His	Pro	Val	Ser	Gln	Glu	Ser	Ser	Trp	Ser
1				5					10					15	
Gln	Glu	Tyr	Ser	Phe	Gly	Pro	Ser	Ala	Val	Leu	Gly	Asp	Phe	Gly	Ser
		20						25					30		
Ser	Arg	Leu	Ile	Glu	Lys	Glu	Cys	Leu	Glu	Lys	Glu	Ser	Arg	Asp	Tyr
	35					40					45				
Asp	Val	Asp	His	Pro	Gly	Glu	Ala	Asp	Ser	Val	Leu	Arg	Gly	Ser	Ser
	50				55					60					
Gln	Val	Gln	Ala	Arg	Gly	Arg	Ala	Leu	Asn	Ile	Val	Asp	Gln	Glu	Gly
65					70				75				80		
Ser	Leu	Leu	Gly	Lys	Gly	Glu	Thr	Gln	Gly	Leu	Leu	Thr	Ala	Lys	Gly
			85					90					95		
Gly	Val	Gly	Lys	Leu	Val	Thr	Leu	Arg	Asn	Val	Ser	Thr	Lys	Lys	Ile

```

      100      105      110
Pro Thr Val Asn Arg Ile Thr Pro Lys Thr Gln Gly Thr Asn Gln Ile
      115      120      125
Gln Lys Asn Thr Pro Ser Pro Asp Val Thr Leu Gly Thr Asn Pro Gly
      130      135      140
Thr Glu Asp Ile Gln Phe Pro Ile Gln Lys Ile Pro Leu Gly Leu Asp
      145      150      155      160
Leu Lys Asn Leu Arg Leu Pro Arg Arg Lys Met Ser Phe Asp Ile Ile
      165      170      175
Asp Lys Ser Asp Val Phe Ser Arg Phe Gly Ile Glu Ile Ile Lys Trp
      180      185      190
Ala Gly Phe His Thr Ile Lys Leu Asp Tyr
      195      200

```

<210> 5645
 <211> 156
 <212> DNA
 <213> Homo sapiens

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<400> 5645
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cctcagatca gcttccccctc tcccaggcaa gaggacacga gcactggcaa gttcacctgc
120
aaagtccccg gcctctacta ctttgtctac cagcgc
156

```

<210> 5646
 <211> 52
 <212> PRT
 <213> Homo sapiens

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<400> 5646
Pro Arg Pro Ser Arg Arg Arg Asn Cys Arg Trp Ala Val Phe Gly Leu
1      5      10      15
Ala Gln Arg Cys Pro Gln Ile Ser Phe Pro Ser Pro Arg Gln Glu Asp
20      25      30
Thr Ser Thr Gly Lys Phe Thr Cys Lys Val Pro Gly Leu Tyr Tyr Phe
35      40      45
Val Tyr His Ala
50

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<210> 5647
 <211> 150
 <212> DNA
 <213> Homo sapiens

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<400> 5647
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aggcccaagg gggagccagg aatcccagcc attcccggga tccgaggacc caaagggcag
120
aagggagAAC ccggcttacc cgccatccn
150

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<210> 5648
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 5648
 Pro Met Gly Pro Gly Thr Leu Ala Phe Pro Gly Gly Pro Met Gly Pro
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 Phe Phe Pro Gly Arg Pro Lys Gly Glu Pro Gly Ile Pro Ala Ile Pro
 20 25 30
 Gly Ile Arg Gly Pro Lys Gly Gln Lys Gly Glu Pro Gly Leu Pro Gly
 35 40 45
 His Pro
 50

<210> 5649
 <211> 345
 <212> DNA
 <213> Homo sapiens

<400> 5649
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 120
 gacccgagtc tccggcgag cgcggggcgc ttgctccgct cgcaggtcat ccacagcggg
 180
 cacttcattg tgctcgcgc gcacagcgc tcgctgcccc ggcggcgcga ccaggagggt
 240
 ccgtggggcc ctcgacttc gggccgcgca gtatcgaccc cacactcaca cgcctcttcg
 300
 agtgcttgag cctggcctac agtggaagc tggggtctcc caagt
 345

<210> 5650
 <211> 100
 <212> PRT
 <213> Homo sapiens

<400> 5650
 Met Ala Val Ala Ala Thr Ala Trp Ser Leu Gly Ser Arg Pro Ala
 1 5 10 15
 Gln Thr Arg Thr Arg Thr Gln Thr Arg Arg Thr Arg Val Ser Gly Ala
 20 25 30
 Ala Arg Ala Ala Cys Ser Ala Arg Ser Ser Thr Ala Val Thr Ser
 35 40 45
 Trp Cys Arg Arg Thr Ala Thr Arg Cys Pro Gly Gly Ala Thr Arg
 50 55 60
 Arg Val Arg Gly Ala Leu Arg Leu Arg Ala Ala Gln Tyr Arg Pro His
 65 70 75 80
 Thr His Thr Pro Leu Arg Val Leu Glu Pro Gly Leu Gln Trp Gln Ala
 85 90 95
 Gly Val Ser Gln

100

<210> 5651
 <211> 615
 <212> DNA
 <213> Homo sapiens

<400> 5651
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 ggagaagtgg cgctcagatcc ggccgggcag tagaggaaat tgcggtagtg accctcgggc
 120
 ctgcgccatga agagccgctt tagcaccatt gacctccgcg ccgtactcgc ggagctgaat
 180
 gctagcttgc taggaatgag agtaaacaat gtttatgatg tggataataa gacataacct
 240
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 300
 catacaacag aatttgagtgc gcctaagaat atgatgccgt ctagttttgc catgaagtgc
 360
 cgaaaacatt tgaagagtgc gagattagtc agtgcaaac agcttggtgt ggatagaatt
 420
 gtagattttc aatttggaag tgatgaagct gcttaccatt taatcattga gctctatgat
 480
 agggggaaca ttgttcttac agattatgag tacgtaattt taaatattct aagggttcga
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 600
 agagctgctg aacct
 615

<210> 5652
 <211> 163
 <212> PRT
 <213> Homo sapiens

<400> 5652
 Met Lys Ser Arg Phe Ser Thr Ile Asp Leu Arg Ala Val Leu Ala Glu
 1 5 10 15
 Leu Asn Ala Ser Leu Leu Gly Met Arg Val Asn Asn Val Tyr Asp Val
 20 25 30
 Asp Asn Lys Thr Tyr Leu Ile Arg Leu Gln Lys Pro Asp Phe Lys Ala
 35 40 45
 Thr Leu Leu Leu Glu Ser Gly Ile Gln Ile His Thr Thr Glu Phe Glu
 50 55 60
 Trp Pro Lys Asn Met Met Pro Ser Ser Phe Ala Met Lys Cys Arg Lys
 65 70 75 80
 His Leu Lys Ser Arg Arg Leu Val Ser Ala Lys Gln Leu Gly Val Asp
 85 90 95
 Arg Ile Val Asp Phe Gln Phe Gly Ser Asp Glu Ala Ala Tyr His Leu
 100 105 110
 Ile Ile Glu Leu Tyr Asp Arg Gly Asn Ile Val Leu Thr Asp Tyr Glu
 115 120 125
 Tyr Val Ile Leu Asn Ile Leu Arg Phe Arg Thr Asp Glu Ala Asp Asp

130	135	140
Val Lys Phe Ala Val	Arg Glu Arg Tyr Pro	Leu Asp His Ala Arg Ala
145	150	155
Ala Glu Pro		160

<210> 5653

<211> 1439

<212> DNA

<213> Homo sapiens

<400> 5653

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caccttctgt ggccacacgt ccaaaaccaa tcagggtcaac tcggggcggg tgctgctgag
120
gttgacgggtg aacttgccag tgctcgtgtc ataatctccc tcgggggttg tgaggaccgc
180
gttgaatctg atcaggctgt tgggtgcagg gggctggtgg gtctgccgag tgaccactca
240
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300
ccagaaacgg ccacactgca ggtgaggccc ggaccctgc ccagttcctt ctccgggatg
360
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420
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480
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ggccatctg gaaaaaatg ccccatggga cccctggga tgccaggggt gcccggcccc
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accagatgga cttctcctcc agggagccca ccctgaccca ccccactgc accccctccc
1260

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catgggttct ctccttcttc tgaacttctt taggagtcac tgcttggtg gttcctggga
 1320
 cacttaacca atgccttctg gtactgccat tctttttttt ttttttcaag tattggaagg
 1380
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 1439

<210> 5654

<211> 245

<212> PRT

<213> Homo sapiens

<400> 5654

Met	Asp	Val	Gly	Pro	Ser	Ser	Leu	Pro	His	Leu	Gly	Leu	Lys	Leu	Leu
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Leu	Leu	Leu	Leu	Leu	Leu	Pro	Leu	Arg	Gly	Gln	Ala	Asn	Thr	Gly	Cys
			20					25						30	
Tyr	Gly	Ile	Pro	Gly	Met	Pro	Gly	Leu	Pro	Gly	Ala	Pro	Gly	Lys	Asp
		35				40						45			
Gly	Tyr	Asp	Gly	Leu	Pro	Gly	Pro	Lys	Gly	Glu	Pro	Gly	Ile	Pro	Ala
	50					55					60				
Ile	Pro	Gly	Ile	Arg	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Glu	Pro	Gly	Leu
65					70					75				80	
Pro	Gly	His	Pro	Gly	Lys	Asn	Gly	Pro	Met	Gly	Pro	Pro	Gly	Met	Pro
				85				90						95	
Gly	Val	Pro	Gly	Pro	Met	Gly	Ile	Pro	Gly	Glu	Pro	Gly	Glu	Glu	Gly
			100					105						110	
Arg	Tyr	Lys	Gln	Lys	Phe	Gln	Ser	Val	Phe	Thr	Val	Thr	Arg	Gln	Thr
		115					120					125			
His	Gln	Pro	Pro	Ala	Pro	Asn	Ser	Leu	Ile	Arg	Phe	Asn	Ala	Val	Leu
		130				135						140			
Thr	Asn	Pro	Gln	Gly	Asp	Tyr	Asp	Thr	Ser	Thr	Gly	Lys	Phe	Thr	Cys
145					150					155				160	
Lys	Val	Pro	Gly	Leu	Tyr	Tyr	Phe	Val	Tyr	His	Ala	Ser	His	Thr	Ala
			165					170						175	
Asn	Leu	Cys	Val	Leu	Leu	Tyr	Arg	Ser	Gly	Val	Lys	Val	Val	Thr	Phe
		180					185							190	
Cys	Gly	His	Thr	Ser	Lys	Thr	Asn	Gln	Val	Asn	Ser	Gly	Gly	Val	Leu
		195					200					205			
Leu	Arg	Leu	Gln	Val	Gly	Glu	Glu	Val	Trp	Leu	Ala	Val	Asn	Asp	Tyr
	210					215					220				
Tyr	Asp	Met	Val	Gly	Ile	Gln	Gly	Ser	Asp	Ser	Val	Phe	Ser	Gly	Phe
225					230					235					240
Leu	Leu	Phe	Pro	Asp											
				245											

<210> 5655

<211> 3810

<212> DNA

<213> Homo sapiens

<400> 5655

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360
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480
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660
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2340
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2640
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2700
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2760
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2820
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3240
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3300

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 3420
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 3480
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 3600
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 3660
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 3780
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 3810

<210> 5656

<211> 987

<212> PRT

<213> Homo sapiens

<400> 5656

Asp Leu Leu Glu Glu Asp Glu Leu Leu Glu Gln Lys Phe Gln Glu Ala
 1 5 10 15
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 20 25 30
 Ala Glu Val Arg Arg Glu Trp Ala Lys Tyr Met Glu Val His Glu Lys
 35 40 45
 Ala Ser Phe Thr Asn Ser Glu Leu His Arg Ala Met Asn Leu His Val
 50 55 60
 Gly Asn Leu Arg Leu Leu Ser Gly Pro Leu Asp Gln Val Arg Ala Ala
 65 70 75 80
 Leu Pro Thr Pro Ala Leu Ser Pro Glu Asp Lys Ala Val Leu Gln Asn
 85 90 95
 Leu Lys Arg Ile Leu Ala Lys Val Gln Glu Met Arg Asp Gln Arg Val
 100 105 110
 Ser Leu Glu Gln Gln Leu Arg Glu Leu Ile Gln Lys Asp Asp Ile Thr
 115 120 125
 Ala Ser Leu Val Thr Thr Asp His Ser Glu Met Lys Lys Leu Phe Glu
 130 135 140
 Glu Gln Leu Lys Lys Tyr Asp Gln Leu Lys Val Tyr Leu Glu Gln Asn
 145 150 155 160
 Leu Ala Ala Gln Asp Arg Val Leu Cys Ala Leu Thr Glu Ala Asn Val
 165 170 175
 Gln Tyr Ala Ala Val Arg Arg Val Leu Ser Asp Leu Asp Gln Lys Trp
 180 185 190
 Asn Ser Thr Leu Gln Thr Leu Val Ala Ser Tyr Glu Ala Tyr Glu Asp
 195 200 205
 Leu Met Lys Lys Ser Gln Glu Gly Arg Asp Phe Tyr Ala Asp Leu Glu
 210 215 220
 Ser Lys Val Ala Ala Leu Leu Glu Arg Thr Gln Ser Thr Cys Gln Ala

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225          230          235          240
Arg Glu Ala Ala Arg Gln Gln Leu Leu Asp Arg Glu Leu Lys Lys Lys
          245          250          255
Pro Pro Pro Arg Pro Thr Ala Pro Lys Pro Leu Leu Pro Arg Arg Glu
          260          265          270
Glu Ser Glu Ala Val Glu Ala Gly Asp Pro Pro Glu Glu Leu Arg Ser
          275          280          285
Leu Pro Pro Asp Met Val Ala Gly Pro Arg Leu Pro Asp Thr Phe Leu
          290          295          300
Gly Ser Ala Thr Pro Leu His Phe Pro Pro Ser Pro Phe Pro Ser Ser
305          310          315          320
Thr Gly Pro Gly Pro His Tyr Leu Ser Gly Pro Leu Pro Pro Gly Thr
          325          330          335
Tyr Ser Gly Pro Thr Gln Leu Ile Gln Pro Arg Ala Pro Gly Pro His
          340          345          350
Ala Met Pro Val Ala Pro Gly Pro Ala Leu Tyr Pro Ala Pro Ala Tyr
          355          360          365
Thr Pro Glu Leu Gly Leu Val Pro Arg Ser Ser Pro Gln His Gly Val
370          375          380
Val Ser Ser Pro Tyr Val Gly Val Gly Pro Ala Pro Pro Val Ala Gly
385          390          395          400
Leu Pro Ser Ala Pro Pro Pro Gln Phe Ser Gly Pro Glu Leu Ala Met
          405          410          415
Ala Val Arg Pro Ala Thr Thr Thr Val Asp Ser Ile Gln Ala Pro Ile
          420          425          430
Pro Ser His Thr Ala Pro Arg Pro Asn Pro Thr Pro Ala Pro Pro Pro
          435          440          445
Pro Cys Phe Pro Val Pro Pro Pro Gln Pro Leu Pro Thr Pro Tyr Thr
          450          455          460
Tyr Pro Ala Gly Ala Lys Gln Pro Ile Pro Ala Gln His His Phe Ser
465          470          475          480
Ser Gly Ile Pro Thr Gly Phe Pro Ala Pro Arg Ile Gly Pro Gln Pro
          485          490          495
Gln Pro His Pro Gln Pro His Pro Ser Gln Ala Phe Gly Pro Gln Pro
          500          505          510
Pro Gln Gln Pro Leu Pro Leu Gln His Pro His Leu Phe Pro Pro Gln
          515          520          525
Ala Pro Gly Leu Leu Pro Pro Gln Ser Pro Tyr Pro Tyr Ala Pro Gln
          530          535          540
Pro Gly Val Leu Gly Gln Pro Pro Pro Pro Leu His Thr Gln Leu Tyr
545          550          555          560
Pro Gly Pro Ala Gln Asp Pro Leu Pro Ala His Ser Gly Ala Leu Pro
          565          570          575
Phe Pro Ser Pro Gly Pro Pro Gln Pro Pro His Pro Pro Leu Ala Tyr
          580          585          590
Gly Pro Ala Pro Ser Thr Arg Pro Met Gly Pro Gln Ala Ala Pro Leu
          595          600          605
Thr Ile Arg Gly Pro Ser Ser Ala Gly Gln Ser Thr Pro Ser Pro His
          610          615          620
Leu Val Pro Ser Pro Ala Pro Ser Pro Gly Pro Gly Pro Val Pro Pro
625          630          635          640
Arg Pro Pro Ala Ala Glu Pro Pro Pro Cys Leu Arg Arg Gly Ala Ala
          645          650          655
Ala Ala Asp Leu Leu Ser Ser Ser Pro Glu Ser Gln His Gly Gly Thr

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660 665 670
 Gln Ser Pro Gly Gly Gly Gln Pro Leu Leu Gln Pro Thr Lys Val Asp
 675 680 685
 Ala Ala Glu Gly Arg Arg Pro Gln Ala Leu Arg Leu Ile Glu Arg Asp
 690 695 700
 Pro Tyr Glu His Pro Glu Arg Leu Arg Gln Leu Gln Gln Glu Leu Glu
 705 710 715 720
 Ala Phe Arg Gly Gln Leu Gly Asp Val Gly Ala Leu Asp Thr Val Trp
 725 730 735
 Arg Glu Leu Gln Asp Ala Gln Glu His Asp Ala Arg Gly Arg Ser Ile
 740 745 750
 Ala Ile Ala Arg Cys Tyr Ser Leu Lys Asn Arg His Gln Asp Val Met
 755 760 765
 Pro Tyr Asp Ser Asn Arg Val Val Leu Arg Ser Gly Lys Asp Asp Tyr
 770 775 780
 Ile Asn Ala Ser Cys Val Glu Gly Leu Ser Pro Tyr Cys Pro Pro Leu
 785 790 795 800
 Val Ala Thr Gln Ala Pro Leu Pro Gly Thr Ala Ala Asp Phe Trp Leu
 805 810 815
 Met Val His Glu Gln Lys Val Ser Val Ile Val Met Leu Val Ser Glu
 820 825 830
 Ala Glu Met Glu Lys Gln Lys Val Ala Arg Tyr Phe Pro Thr Glu Arg
 835 840 845
 Gly Gln Pro Met Val His Gly Ala Leu Ser Leu Ala Leu Ser Ser Val
 850 855 860
 Arg Ser Thr Glu Thr His Val Glu Arg Val Leu Ser Leu Gln Phe Arg
 865 870 875 880
 Asp Gln Ser Leu Lys Arg Ser Leu Val His Leu His Phe Pro Thr Trp
 885 890 895
 Pro Glu Leu Gly Leu Pro Asp Ser Pro Ser Asn Leu Leu Arg Phe Ile
 900 905 910
 Gln Glu Val His Ala His Tyr Leu His Gln Arg Pro Leu His Thr Pro
 915 920 925
 Ile Ile Val His Cys Ser Ser Gly Val Gly Arg Thr Gly Ala Phe Ala
 930 935 940
 Leu Leu Tyr Ala Ala Val Gln Glu Val Glu Ala Gly Asn Gly Ile Pro
 945 950 955 960
 Glu Leu Pro Gln Leu Val Arg Arg Met Arg Gln Gln Arg Lys His Met
 965 970 975
 Leu Gln Glu Lys Leu His Leu Arg Xaa Leu Leu
 980 985

<210> 5657

<211> 1020

<212> DNA

<213> Homo sapiens

<400> 5657

tgcggacagt tgaagaagcg accgagggac tgggagtcgt tagtgaggat gacgcggcat
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 ggcaagaact gcaccgcagg cgcgcgtctac acctaccacg agaagaagaa ggacacagcg
 120
 gcctcgggct atgggaccca gaacattcga ctgagccggg atgccgtgaa ggacttcgac
 180

tgctgttgtc tctccctgca gccttgccac gatcctgttg tcaccccaga tggctacctg
 240
 tatgagcgtg aggccatcct ggagtacatt ctgcaccaga agaaggagat tgcccggcag
 300
 atgaaggcct acgagaagca gcggggcacc cggcgcgagg agcagaagga gcttcagcgg
 360
 gcggcctcgc aggaccatgt gcggggcttc ctggagaagg agtcggctat cgtgagccgg
 420
 cccctcaacc ctttcacagc caaggccctc tcgggcacca gccagatga tgtccaacct
 480
 gggcccagtg tgggtcctcc aagtaaggac aaggacaaag tgctgcccag cttctggatc
 540
 ccgtcgtgta cgcccgaagc caaggccacc aagctggaga agccgtcccg cacggtgacc
 600
 tgccccatgt cagggaagcc cctgcgcatg tcggacctga cgcccgtagc cttcacaccg
 660
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 720
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 780
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 840
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 900
 ggctccggag tgaagctgca agcggagaaa tcacggccgg tgatgcaggc ctgagtgtgt
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 1020

<210> 5658

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5658

Met Thr Arg His Gly Lys Asn Cys Thr Ala Gly Ala Val Tyr Thr Tyr
 1 5 10 15
 His Glu Lys Lys Lys Asp Thr Ala Ala Ser Gly Tyr Gly Thr Gln Asn
 20 25 30
 Ile Arg Leu Ser Arg Asp Ala Val Lys Asp Phe Asp Cys Cys Cys Leu
 35 40 45
 Ser Leu Gln Pro Cys His Asp Pro Val Val Thr Pro Asp Gly Tyr Leu
 50 55 60
 Tyr Glu Arg Glu Ala Ile Leu Glu Tyr Ile Leu His Gln Lys Lys Glu
 65 70 75 80
 Ile Ala Arg Gln Met Lys Ala Tyr Glu Lys Gln Arg Gly Thr Arg Arg
 85 90 95
 Glu Glu Gln Lys Glu Leu Gln Arg Ala Ala Ser Gln Asp His Val Arg
 100 105 110
 Gly Phe Leu Glu Lys Glu Ser Ala Ile Val Ser Arg Pro Leu Asn Pro
 115 120 125
 Phe Thr Ala Lys Ala Leu Ser Gly Thr Ser Pro Asp Asp Val Gln Pro
 130 135 140
 Gly Pro Ser Val Gly Pro Pro Ser Lys Asp Lys Asp Lys Val Leu Pro

145		150		155		160
Ser Phe Trp Ile Pro Ser Leu Thr Pro Glu Ala Lys Ala Thr Lys Leu						
	165		170		175	
Glu Lys Pro Ser Arg Thr Val Thr Cys Pro Met Ser Gly Lys Pro Leu						
	180		185		190	
Arg Met Ser Asp Leu Thr Pro Val His Phe Thr Pro Leu Asp Ser Ser						
	195		200		205	
Val Asp Arg Val Gly Leu Ile Thr Arg Ser Glu Arg Tyr Val Cys Ala						
	210		215		220	
Val Thr Arg Asp Ser Leu Ser Asn Ala Thr Pro Cys Ala Val Leu Arg						
225		230		235		240
Pro Ser Gly Ala Val Val Thr Leu Glu Cys Val Glu Lys Leu Ile Arg						
	245		250		255	
Lys Asp Met Val Asp Pro Val Thr Gly Asp Lys Leu Thr Asp Arg Asp						
	260		265		270	
Ile Ile Val Leu Gln Arg Gly Gly Thr Gly Phe Ala Gly Ser Gly Val						
	275		280		285	
Lys Leu Gln Ala Glu Lys Ser Arg Pro Val Met Gln Ala						
290		295		300		

<210> 5659
 <211> 1263
 <212> DNA
 <213> Homo sapiens

<400> 5659
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 120
 tcagagaagg cttagatcta tgcattgggt gttattctca gatgcagaga tgtaaagcc
 180
 attttctct tctgttttca ggtcacatgt gccaatttaa cgaacggtgg aaagtcagaa
 240
 cttctgaaat caggaagcag caaatccaca ctaaagcaca tatggacaga aagcagcaaa
 300
 gacttgtcta tcagccgact cctgtcacag acttttcgtg gcaaagagaa tgatacagat
 360
 ttggacctga gatatgacac ccagaaacct tattctgagc aagacctctg ggactggctg
 420
 aggaactcca cagaccttca agagcctcgg ccagggcca agagaaggcc cattgttaaa
 480
 acgggcaagt ttaagaaaat gtttgatgg ggcgattttc attccaacat caaaacagtg
 540
 aagctgaacc tgttgataac tgggaaaatt gtagatcatg gcaatgggac atttagtggt
 600
 tatttcaggc ataattcaac tggtaagggt aatgtatctg tcagcttggt accccctaca
 660
 aaaatcgtgg aatttgactt ggcacaacaa accgtgattg atgccaaaga ttccaagtct
 720
 tttaattgtc gcattgaata tgaaaagggt gacaaggcta ccaagaacac actctgcaac
 780
 tatgacctt caaaaacctg ttaccaggag caaacccaaa gtcatgtatc ctggctctgc
 840

tccaagccct ttaaggatgat ctgtattttac atttcctttt atagtacaga ttataaactg
 900
 gtacagaaag tgtgccctga ctacaactac cacagtgcaca caccttactt tcctcggga
 960
 tgaagggtgaa catgggggtg agactgaagc ctgaggaatt aaaggtcata tgacagggt
 1020
 gttacctcaa agaagaaggt cacatctgtt gcctggaatg tgtctacact gctgctcttg
 1080
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 1260
 att
 1263

<210> 5660
 <211> 253
 <212> PRT
 <213> Homo sapiens

<400> 5660
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 Ser Gly Ser Ser Lys Ser Thr Leu Lys His Ile Trp Thr Glu Ser Ser
 20 25 30
 Lys Asp Leu Ser Ile Ser Arg Leu Leu Ser Gln Thr Phe Arg Gly Lys
 35 40 45
 Glu Asn Asp Thr Asp Leu Asp Leu Arg Tyr Asp Thr Pro Glu Pro Tyr
 50 55 60
 Ser Glu Gln Asp Leu Trp Asp Trp Leu Arg Asn Ser Thr Asp Leu Gln
 65 70 75 80
 Glu Pro Arg Pro Arg Ala Lys Arg Arg Pro Ile Val Lys Thr Gly Lys
 85 90 95
 Phe Lys Lys Met Phe Gly Trp Gly Asp Phe His Ser Asn Ile Lys Thr
 100 105 110
 Val Lys Leu Asn Leu Leu Ile Thr Gly Lys Ile Val Asp His Gly Asn
 115 120 125
 Gly Thr Phe Ser Val Tyr Phe Arg His Asn Ser Thr Gly Gln Gly Asn
 130 135 140
 Val Ser Val Ser Leu Val Pro Pro Thr Lys Ile Val Glu Phe Asp Leu
 145 150 155 160
 Ala Gln Gln Thr Val Ile Asp Ala Lys Asp Ser Lys Ser Phe Asn Cys
 165 170 175
 Arg Ile Glu Tyr Glu Lys Val Asp Lys Ala Thr Lys Asn Thr Leu Cys
 180 185 190
 Asn Tyr Asp Pro Ser Lys Thr Cys Tyr Gln Glu Gln Thr Gln Ser His
 195 200 205
 Val Ser Trp Leu Cys Ser Lys Pro Phe Lys Val Ile Cys Ile Tyr Ile
 210 215 220
 Ser Phe Tyr Ser Thr Asp Tyr Lys Leu Val Gln Lys Val Cys Pro Asp
 225 230 235 240
 Tyr Asn Tyr His Ser Asp Thr Pro Tyr Phe Pro Ser Gly

245

250

<210> 5661
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 5661
 agagctcgaa ggggccatat gacactcctc ccggaccctt ggacacacac agccctgggg
 60
 actggatgcc ttggagcatg caagtccaga gcaccctggg agccctgggtg catgggaccc
 120
 ataaccctagt gcacggcaag gaccagcag gaagcaccag ccactggccc cgacctcccc
 180
 caccaggac ctgacgggca cttagacaca cacagtggcc tgagctccaa ctccagcatg
 240
 accagcggg agcttcagca gtactggcag aaccagaaat gccgctggaa gcacgtcaaa
 300
 ctgctctttg agatcgcttc agctcgcatc gaggagagaa aagtctctaa gtttgtgatg
 360
 gggaatatcaa ggcttgaga gatgacttat ccagggtcac gtggcgagac agggacagca
 420
 ccagaaccag acccgagatg tccacgtcaa agtgacatgc tctgagaggc agcacacaca
 480
 gaataaccct gcatccaaat tccaggaagc tcttaggggt catccagctg ggcttagggg
 540
 tgcagggtca gtgctgaggc ctgggcaggg ccgctagc
 578

<210> 5662
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 5662
 Met Thr Leu Leu Pro Asp Pro Trp Thr His Thr Ala Leu Gly Thr Gly
 1 5 10 15
 Cys Leu Gly Ala Cys Lys Ser Arg Ala Pro Trp Glu Pro Trp Cys Met
 20 25 30
 Gly Pro Ile Thr Gln Cys Thr Ala Arg Thr Gln Gln Glu Ala Pro Ala
 35 40 45
 Thr Gly Pro Asp Leu Pro His Pro Gly Pro Asp Gly His Leu Asp Thr
 50 55 60
 His Ser Gly Leu Ser Ser Asn Ser Ser Met Thr Thr Arg Glu Leu Gln
 65 70 75 80
 Gln Tyr Trp Gln Asn Gln Lys Cys Arg Trp Lys His Val Lys Leu Leu
 85 90 95
 Phe Glu Ile Ala Ser Ala Arg Ile Glu Glu Arg Lys Val Ser Lys Phe
 100 105 110
 Val Met Gly Lys Ser Arg Pro Gly Glu Met Thr Tyr Pro Gly Ser Arg
 115 120 125
 Gly Glu Thr Gly Thr Ala Pro Glu Pro Asp Pro Arg Cys Pro Arg Gln
 130 135 140
 Ser Asp Met Leu

145

<210> 5663
 <211> 857
 <212> DNA
 <213> Homo sapiens

<400> 5663
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 tgactcactg gctaggagtg ccccatgccc agttcttaga gacccttgat agctcctaga
 120
 agacaggagg ctgccgtggt caagaagggc caagccttga agtctcacgg caccctctgt
 180
 ggtggaggga taaggctcag gggccaacta ctgggtcttg cagtecccat cgttgctgtg
 240
 ggctgtcttc accttcttta gttccttctg tagctcagac tcggccacca caacctcctt
 300
 tggcttctgg taagagatga tcagggtgca gttggcgtgg gcaaagctca gcaaggcgtc
 360
 atccagagggt agctgggtgc tatctagatc aggaatggag aacttcttgt agtacttctt
 420
 gttgggtgtt ctgacaatga tgcagcgttc cttctggtcc acagagacac tatagacatc
 480
 cttaggatag gggagggttc gaatccgccca ctggaaactc atcttggtgt ccttgcgcat
 540
 gaagatagga ttggcattgc tttccttgat gagttcaggc ccagggttcc ctgctcctag
 600
 gggcgctggg tctcctactt caagctgccca ctggcccatg gctcccaggg cacttttcac
 660
 acgccacttt ctcaacaagta gttcactcgt cttctcgtca tattcttcag ccatttctt
 720
 gccgtctggg aataaatagt gaaccttctt tctcccgctc tgcagcagcg cagtcttctg
 780
 ggctgtccgc agactctcca accagcccggt caccgccatc tttccctgc taagcagcac
 840
 gccagccgc tgccatg
 857

<210> 5664
 <211> 203
 <212> PRT
 <213> Homo sapiens

<400> 5664
 Met Ala Val Thr Gly Trp Leu Glu Ser Leu Arg Thr Ala Gln Lys Thr
 1 5 10 15
 Ala Leu Leu Gln Asp Gly Arg Arg Lys Val His Tyr Leu Phe Pro Asp
 20 25 30
 Gly Lys Glu Met Ala Glu Glu Tyr Asp Glu Lys Thr Ser Glu Leu Leu
 35 40 45
 Val Arg Lys Trp Arg Val Lys Ser Ala Leu Gly Ala Met Gly Gln Trp
 50 55 60
 Gln Leu Glu Val Gly Asp Pro Ala Pro Leu Gly Ala Gly Asn Leu Gly

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65          70          75          80
Pro Glu Leu Ile Lys Glu Ser Asn Ala Asn Pro Ile Phe Met Arg Lys
          85          90          95
Asp Thr Lys Met Ser Phe Gln Trp Arg Ile Arg Asn Leu Pro Tyr Pro
          100          105          110
Lys Asp Val Tyr Ser Val Ser Val Asp Gln Lys Glu Arg Cys Ile Ile
          115          120          125
Val Arg Thr Thr Asn Lys Lys Tyr Tyr Lys Lys Phe Ser Ile Pro Asp
          130          135          140
Leu Asp Arg His Gln Leu Pro Leu Asp Asp Ala Leu Leu Ser Phe Ala
          145          150          155          160
His Ala Asn Cys Thr Leu Ile Ile Ser Tyr Gln Lys Pro Lys Glu Val
          165          170          175
Val Val Ala Glu Ser Glu Leu Gln Lys Glu Leu Lys Lys Val Lys Thr
          180          185          190
Ala His Ser Asn Asp Gly Asp Cys Lys Thr Gln
          195          200

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<210> 5665
 <211> 531
 <212> DNA
 <213> Homo sapiens

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<400> 5665
gtcaagtcct gtaggcagca tagggccctg gtcagcttt tctctgcaga ggcctcgctt
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gagtgggtgg ggtttgcctg cccgcagatc tccacgggag ggggaggggt caggcctccc
120
cagcggccct ctgaagtcac ttgcttcacg gaggtgttac tgtctgctgc tggacagagc
180
atgatggggg ctgcaagggc tccctcaaac cctggactcc tccaacagag ggctcctggt
240
tgccaggctc agctctgccc tgcgtcggcc ccagggcgta gggaggggtgt ttaatcctgg
300
cccgggcctt cccgcaggt ggagcgcgtg tcgcacccgc tgctgcagca gcagtatgag
360
ctgtaccggg agcgctgct gcagcgatgc gagcggcgcc cggaggagca ggtgctgtac
420
cacggcacga cggcacggc agtgcctgac atctgcgcc acggcttcaa ccgcagcttc
480
tgcgccgca acgccacggc ctacgggaag ggcgtgtatt tcgccaggcg c
531

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<210> 5666
 <211> 79
 <212> PRT
 <213> Homo sapiens

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<400> 5666
Ser Trp Pro Gly Pro Ser Pro Gln Val Glu Arg Val Ser His Pro Leu
1      5      10      15
Leu Gln Gln Gln Tyr Glu Leu Tyr Arg Glu Arg Leu Leu Gln Arg Cys
20     25     30
Glu Arg Arg Pro Val Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro

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      35              40              45
Ala Val Pro Asp Ile Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly
      50              55              60
Arg Asn Ala Thr Val Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg
      65              70              75

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<210> 5667
 <211> 858
 <212> DNA
 <213> Homo sapiens

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<400> 5667
nattcggcac gaggtagtca aagtatgcag cctccaatta ttcactctt cctgttgtc
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aagaaagata tgacatttct acatgaagga aatgactcca aagtagatgg ttagtaaac
120
tttgagaagt taagaatgat ttccaaggaa atccgccaag ttgttcgaat gacttctgct
180
aacatggacc cagctatgat gtttcgacag aggtcactga gtcaaggaag cacaaattca
240
aacatgctgg atgttcaggg aggtgctcac aaaaaaaggg cacgccgcag ctctctgctt
300
aatgccaaga agctatatga ggatgcccaa atggcaagga aggtgaagca gtatctttcc
360
agtctcgatg tagagacaga tgaggagaag ttccagatga tgtcattaca gntggagcct
420
gcatatggta cctgtgagta caagttttca tttatgtgac gctaaagagc acaacaaaat
480
aaaaacttat ttctctagaa ttatacctaa gtccaagaa aattaacttt cactcacaaa
540
agattgctgg cataccttaa gcatcatgtg atccaattaa tcacagactg aatcccatcc
600
attcctgatg gctacactat ccaaaaaata gagggataag tagatcttta aaaagctttt
660
taattctttt aaaaactgga tcattataga ggaggctttc tgtttgagaa catttttata
720
ttcatcccta aagagtaaac ataagtggaa tttttacctc tttttatttc atggataata
780
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840
aggtgccagt agtaaggt
858

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<210> 5668
 <211> 152
 <212> PRT
 <213> Homo sapiens

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<400> 5668
Xaa Ser Ala Arg Gly Ser Gln Ser Met Gln Pro Pro Ile Ile Pro Leu
      1              5              10              15
Phe Pro Val Val Lys Lys Asp Met Thr Phe Leu His Glu Gly Asn Asp
      20              25              30
Ser Lys Val Asp Gly Leu Val Asn Phe Glu Lys Leu Arg Met Ile Ser

```

```

      35          40          45
Lys Glu Ile Arg Gln Val Val Arg Met Thr Ser Ala Asn Met Asp Pro
      50          55          60
Ala Met Met Phe Arg Gln Arg Ser Leu Ser Gln Gly Ser Thr Asn Ser
      65          70          75          80
Asn Met Leu Asp Val Gln Gly Gly Ala His Lys Lys Arg Ala Arg Arg
      85          90          95
Ser Ser Leu Leu Asn Ala Lys Lys Leu Tyr Glu Asp Ala Gln Met Ala
      100          105          110
Arg Lys Val Lys Gln Tyr Leu Ser Ser Leu Asp Val Glu Thr Asp Glu
      115          120          125
Glu Lys Phe Gln Met Met Ser Leu Gln Xaa Glu Pro Ala Tyr Gly Thr
      130          135          140
Cys Glu Tyr Lys Phe Ser Phe Met
      145          150

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<210> 5669
 <211> 1842
 <212> DNA
 <213> Homo sapiens

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<400> 5669
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120
gccatgatgc gcagctccat agagaggggc aaatgggtct tcttccagaa ctgccacctg
180
gcaccaagct ggatgccagc cctagaacgc ctcacgagc acatcaaccc cgacaaggta
240
cacagggact tccgcctctg gctcaccagc ctgccagca acaagttccc agtgtccatc
300
ctgcagaacg gctccaagat gaccattgag ccgccacgcg gtgtcagggc caacctgctg
360
aagtcctata gtagccttgg tgaagacttc ctcaactcct gccacaaggt gatggagttc
420
aagttctctg tgctgtctct gtgcttgctc catgggaacg cctgggagcg ccgtaagttt
480
gggccccctg gcttcaacat cccctatgag ttcacggatg gagatctgcg catctgcac
540
agccagctca agatgttcct ggacgaatat gatgacatcc cctacaaggt cctcaagtac
600
acggcagggg agatcaatta cgggggccgt gtcactgatg actgggacgg gcgctgcac
660
atgaacatct tggaggactt ctacaacctt gacgtgctct cccctgagca cagctacagc
720
gcctcgggca tctaccacca gatcccgctt acctacgacc tccacggcta cctctcctac
780
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840
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900
aaatcatctt ctgcaggcag ccagggccgg gaggagatag tggaggacgt caccctaaac
960

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attctgctca aggtgcctga gcttatcaac ttgcaatggg tgatggccaa gtacccagtg
 1020
 ctgtatgagg aatcaatgaa cacagtacta gtacaagagg tcattaggta caatcggtg
 1080
 ctgcagggtga tcacacagac actgcaagac ctactcaagg cactcaaggg gctggtagtg
 1140
 atgtcctctc agctggagct gatggctgcc agcctgtaca acaatactgt gctgagctc
 1200
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 1260
 caacgcctgg actttctgca ggcttgatc caagatggca tcccagctgt cttctggatc
 1320
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 1380
 tttgtcatct ccattgacac catctccttt gatttcaagg tgatgtttga ggcaccatca
 1440
 gagttaacac aaagacccca agtaggggtgc tatatccatg gattattcct ggaagggtgcc
 1500
 cgctggggtc cagaggcctt ccagctggct gagtctcagc ccaaggagct gtacacagag
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 1680
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 1800
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 1842

<210> 5670

<211> 591

<212> PRT

<213> Homo sapiens

<400> 5670

Phe	Val	Leu	Ser	Pro	Gly	Thr	Asp	Pro	Ala	Ala	Asp	Leu	Tyr	Lys	Phe
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Ala	Glu	Glu	Met	Lys	Phe	Ser	Lys	Lys	Leu	Ser	Ala	Ile	Ser	Leu	Gly
		20						25					30		
Gln	Gly	Gln	Gly	Pro	Arg	Ala	Glu	Ala	Met	Met	Arg	Ser	Ser	Ile	Glu
		35					40					45			
Arg	Gly	Lys	Trp	Val	Phe	Phe	Gln	Asn	Cys	His	Leu	Ala	Pro	Ser	Trp
		50				55					60				
Met	Pro	Ala	Leu	Glu	Arg	Leu	Ile	Glu	His	Ile	Asn	Pro	Asp	Lys	Val
65				70				75						80	
His	Arg	Asp	Phe	Arg	Leu	Trp	Leu	Thr	Ser	Leu	Pro	Ser	Asn	Lys	Phe
			85					90					95		
Pro	Val	Ser	Ile	Leu	Gln	Asn	Gly	Ser	Lys	Met	Thr	Ile	Glu	Pro	Pro
			100				105						110		
Arg	Gly	Val	Arg	Ala	Asn	Leu	Leu	Lys	Ser	Tyr	Ser	Ser	Leu	Gly	Glu
		115				120						125			
Asp	Phe	Leu	Asn	Ser	Cys	His	Lys	Val	Met	Glu	Phe	Lys	Ser	Leu	Leu

gtggtctcta ggccccgaggc cccaaggaga gggctgggtt tctgggagag tgctggtcct
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 480
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 540
 aaccgcatgc ccagtgggta ctgcacggag ctgtaggagg tcacagtgt gtgtacaggg
 600
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 720
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 780
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 840
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 900
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 960
 ggccttgggc tcactcccag gactcgtgt cctcagcag tgccccactg ctgagcggga
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 1074

<210> 5676
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 5676
 Glu Val Thr Val Leu Cys Thr Gly Leu Ser Leu Ser Ile Gly Met Thr
 1 5 10 15
 Ala Thr Ser Gln Gly Cys Arg Ala Gly Gly Arg Cys Gly Trp Ala Cys
 20 25 30
 Ala Cys Phe Arg Arg Gln Gln Asn Arg Thr Gln Pro Ala Val Thr Pro
 35 40 45
 His Ser Arg Ser Arg Arg Thr Ala Ser Arg Met Ser Leu Gly Glu Gln
 50 55 60
 Gly Ser Thr Thr Gly Leu Thr Leu Gly His Arg Ala Pro Ala Pro Trp
 65 70 75 80
 Gly Met Ser Trp His Asn His Arg Arg Gln Val Asn Arg Ile Lys Ser
 85 90 95
 Arg Gln Cys Leu Ser Met Ser Glu Thr Ala Val Ala Arg Ala Trp Pro
 100 105 110
 Arg Ala Ala Gly Pro Ala Leu Ala Ile Ser Pro Gly Leu Ala Arg Gly
 115 120 125
 Gly Leu Gly Leu Thr Pro Arg Thr Arg Cys Pro Gln Arg Val Pro His
 130 135 140
 Cys
 145

<210> 5677
 <211> 477

<212> DNA
<213> Homo sapiens

<400> 5677
agcagctggt cctctttgaa gaggtcgatg ctgaaaggag gccgcctgac tccatggcaa
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120
agggaaagca agatgcagca gtgaggccct ctctggtatc cattcattca cttcactcaa
180
cagctgttta tgaccatgag caatacaagc cttgtgaaga tcctggagca gggcacaagc
240
cgctgacgtc tgctccagtg agaagccctg ctgccttccc caattcgctt tctttccgca
300
gccgcgctg ccccgacccc ggatctgcat gtggaagtac ctggacgtcc attccatgca
360
ccagctggag aagaccacca atgctgagat gagggagggtg ctggctgagc tgctggagct
420
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477

<210> 5678
<211> 151
<212> PRT
<213> Homo sapiens

<400> 5678
Met Ala Ser Leu Arg Leu Cys Ser Gly His Pro Ser Ser Ser Ser Ser
1 5 10 15
Ala Ser Thr Ser Leu Ile Ser Ala Leu Val Val Phe Ser Ser Trp Cys
20 25 30
Met Glu Trp Thr Ser Arg Tyr Phe His Met Gln Ile Arg Gly Arg Gly
35 40 45
Ser Gly Gly Cys Gly Lys Lys Ala Asn Trp Gly Arg Gln Gln Gly Phe
50 55 60
Ser Leu Glu Gln Thr Ser Ala Ala Cys Ala Leu Leu Gln Asp Leu His
65 70 75 80
Lys Ala Cys Ile Ala His Gly His Lys Gln Leu Leu Ser Glu Val Asn
85 90 95
Glu Trp Ile Pro Glu Arg Ala Ser Leu Leu His Leu Ala Phe Pro Thr
100 105 110
Ser Asn Pro Leu Gly Gln Arg Gly Gly Val Leu Pro Leu Leu His Gln
115 120 125
Cys Pro Phe Leu Pro Trp Ser Gln Ala Ala Ser Phe Gln His Arg Pro
130 135 140
Leu Gln Arg Gly Thr Ala Ala
145 150

<210> 5679
<211> 665
<212> DNA
<213> Homo sapiens

<400> 5679

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 120
 tccacctccc agcatgctgg ctccaattcc acctctcagc agcctagccc tgaatccaca
 180
 ccacagcagc ctagtctga atccacacca cagcagccta gccctgaatc cacaccacag
 240
 cattccagcc ttgaaaccac ctcccggcag ccagcattcc aagcccttcc agcaccgaa
 300
 atccgcccgt cctcttctg ccttttatct ccagatgcta acgtgaaggc agccctcaa
 360
 tccaggaaag cagaaaatct tcaagaaaac cctccagtca tcgtaacgcg tgcctccaa
 420
 gccctcggaa ctgtggctgt ggcctgggg gctctaggag ctgcctacta catcactgaa
 480
 tccttgtgaa caagccccta ggcccacagt ctggcagacc tccaccagcc ccaggagttg
 540
 atagggtatg gcgctgggag aagatgttca gaatatctca aaagccaagt ccagaagatc
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 660
 aaaaa
 665

<210> 5680

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5680

Val	Gly	Arg	Ile	Tyr	His	Glu	Glu	Gly	Gln	Glu	Glu	Lys	Val	Arg	Gly
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Gln	Thr	Pro	Pro	Asp	Ser	Thr	Ser	Gln	His	Ala	Gly	Ser	Asn	Ser	Thr
		20					25						30		
Ser	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu
		35				40						45			
Ser	Thr	Pro	Gln	Gln	Pro	Ser	Pro	Glu	Ser	Thr	Pro	Gln	His	Ser	Ser
	50				55			60							
Leu	Glu	Thr	Thr	Ser	Arg	Gln	Pro	Ala	Phe	Gln	Ala	Leu	Pro	Ala	Pro
65				70				75						80	
Glu	Ile	Arg	Arg	Ser	Ser	Cys	Cys	Leu	Leu	Ser	Pro	Asp	Ala	Asn	Val
		85				90							95		
Lys	Ala	Ala	Pro	Gln	Ser	Arg	Lys	Ala	Glu	Asn	Leu	Gln	Glu	Asn	Pro
		100				105						110			
Pro	Val	Ile	Val	Thr	Arg	Val	Leu	Gln	Ala	Leu	Gly	Thr	Val	Ala	Val
	115					120						125			
Ala	Leu	Gly	Ala	Leu	Gly	Ala	Ala	Tyr	Tyr	Ile	Thr	Glu	Ser	Leu	
	130					135						140			

<210> 5681

<211> 1402

<212> DNA

<213> Homo sapiens

<400> 5681
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120
tagacattga tggagcaga aacccaaact ctcccctgg agaatgcac catcctttca
180
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240
gaataccacc tcctcaagct cctccagaag tttggcaagg taaagcagtt tgacttcctc
300
ttccacaagt cagggtgctt ggagggacag cctcgaggct actgttttgt taactttgaa
360
actaagcagg aagcagagca agccatccag tgtctcaatg gcaagttggc cctgtccaag
420
aagctggtgg tgcgatgggc acatgctcaa gtaaagagat atgatcataa caagaatgat
480
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600
gatgcagagt atccagcagc gctgtttat tcctacttta agccaccaga taaaaaagg
660
actactccat attctagaac agcatggaaa tctcgaagat gatggttgtg aattactgta
720
gcagcaaaaag caaattggtc tccacaccta aaatcgtctg cctgtgtact ttgtagatgt
780
gaatggtact attcaacgga gcacaatcac atgttagcat ttggtaacat aatgtttttg
840
gatgttctta tggatgttcc tccctaaac tatgtatgga attgagcatc atccagaata
900
aatagcgttg tatcccaaat tgtgatttga accctgggat gctctaattg gctggttggt
960
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1020
atattattta aatcaggaaa ctaaaaatat taacatctat taaaaaattg agcatttttc
1080
tacgctcgtg tgtcttttac aacataaaga aaaagtaaaa ggcagggagg gaagtgcagag
1140
acagatttta aatcatgttc agaactgttg ttccagaatt tactacggca atccctccaa
1200
ctggactgaa aaagagaaag ttcttgcaa aaaggagctg attctttgaa caaatgttgt
1260
agtaatctgt ttaagaatta tgcttattgt ttcaaaatcc caactaggaa aacatggtgt
1320
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1380
cacaagttct atttgggata tt
1402

<210> 5682

<211> 190

<212> PRT.

<213> Homo sapiens

<400> 5682

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Met Glu Ala Glu Thr Lys Thr Leu Pro Leu Glu Asn Ala Ser Ile Leu
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Ser Glu Gly Ser Leu Gln Glu Gly His Arg Leu Trp Ile Gly Asn Leu
      20           25           30
Asp Pro Lys Ile Thr Glu Tyr His Leu Leu Lys Leu Leu Gln Lys Phe
      35           40           45
Gly Lys Val Lys Gln Phe Asp Phe Leu Phe His Lys Ser Gly Ala Leu
      50           55           60
Glu Gly Gln Pro Arg Gly Tyr Cys Phe Val Asn Phe Glu Thr Lys Gln
65           70           75           80
Glu Ala Glu Gln Ala Ile Gln Cys Leu Asn Gly Lys Leu Ala Leu Ser
      85           90           95
Lys Lys Leu Val Val Arg Trp Ala His Ala Gln Val Lys Arg Tyr Asp
      100          105          110
His Asn Lys Asn Asp Lys Ile Leu Pro Ile Ser Leu Glu Pro Ser Ser
      115          120          125
Ser Thr Glu Pro Thr Gln Ser Asn Leu Ser Val Thr Ala Lys Ile Lys
      130          135          140
Ala Ile Glu Ala Lys Leu Lys Met Met Ala Glu Asn Pro Asp Ala Glu
145          150          155          160
Tyr Pro Ala Ala Pro Val Tyr Ser Tyr Phe Lys Pro Pro Asp Lys Lys
      165          170          175
Arg Thr Thr Pro Tyr Ser Arg Thr Ala Trp Lys Ser Arg Arg
      180          185          190

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<210> 5683

<211> 328

<212> DNA

<213> Homo sapiens

<400> 5683

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cgcagggctg acctgtactg gtgagtaagc attagccatg ggacgcacac aatccagcca
120
atgcttttcag aaggcaccac atgtgatgca cagcctctat ttacatgtga ataattacac
180
tgctgctttc tggttaaaag tagggaaata cagtgttcca gggcatagga atgggtgctct
240
gggtagaaaa gtttattttg ctgggtgggag gcaggttttg ttaataaagc tttgaaatac
300
acaaaatttca ttctggatgc tgatgctg
328

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<210> 5684

<211> 103

<212> PRT

<213> Homo sapiens

<400> 5684

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Met Lys Phe Val Tyr Phe Lys Ala Leu Leu Thr Lys Pro Ala Ser His

```

```

      1             5             10             15
Gln Gln Asn Lys Leu Phe Tyr Pro Glu His His Ser Tyr Ala Leu Glu
      20             25             30
His Cys Ile Ser Leu Leu Leu Thr Arg Lys Gln Gln Cys Asn Tyr Ser
      35             40             45
His Val Asn Arg Gly Cys Ala Ser His Val Val Pro Ser Glu Ser Ile
      50             55             60
Gly Trp Ile Val Cys Val Pro Trp Leu Met Leu Thr His Gln Tyr Arg
      65             70             75             80
Ser Ala Leu Arg Val Cys Arg Asp Gly Gln Cys Leu Thr Ala Glu Ala
      85             90             95
Ser Leu Gly Gln Arg Met Asp
      100

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<210> 5685
 <211> 604
 <212> DNA
 <213> Homo sapiens

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<400> 5685
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ctggcctacg agtctgacgg gatcgtggtt tccaacgaca cataccgtga cctccaaggc
120
gagcggcagg agtgggaagcg cttcatcgag gagcggctgc tcatgtactc cttcgtcaat
180
gacaagtatg ttccctccca gaggccctga cagacttggg gtccacaggg gaagccagag
240
gtgcccttgg caagggtgga gctgggggct gggctctgcg gggccctgtg gccatgggag
300
gttgcggggtc ttggctccag gcagctttga gagtgagacg gatagctcac cacataggag
360
aatcagacc gggaccaggc aggctgtggg gtggagagag tggctaattt gggagataga
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480
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540
cgacttcagg gagggagttc ccctaaaggt gcccattggg tgtggccctc tagaccgggg
600
atcc
604

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<210> 5686
 <211> 69
 <212> PRT
 <213> Homo sapiens

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<400> 5686
Pro Cys Ser Arg Val Gly Gly Lys Arg Val Val Cys Tyr Asp Asp Arg
1             5             10             15
Phe Ile Val Lys Leu Ala Tyr Glu Ser Asp Gly Ile Val Val Ser Asn
      20             25             30
Asp Thr Tyr Arg Asp Leu Gln Gly Glu Arg Gln Glu Trp Lys Arg Phe

```

35 40 45
 Ile Glu Glu Arg Leu Leu Met Tyr Ser Phe Val Asn Asp Lys Tyr Val
 50 55 60
 Pro Ser Gln Arg Pro
 65

<210> 5687
 <211> 328
 <212> DNA
 <213> Homo sapiens

<400> 5687
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 ccccggtctt gcatgcacgc ctgcgtgaac accccgggct cttcccggtg cacctgcccc
 120
 ggtggatccg aaactctggc tgacgggaag agctgtgaga atgtggatga atgtgtgggc
 180
 ctgcagccgg tgtgccccca ggggaccaca tgcataca cgggtggaag cttccagtgt
 240
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 300
 cagtgtgagc ggaacccctg ccccatgg
 328

<210> 5688
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 5688
 Thr Leu Ser Arg Pro Arg Gly Ala Gly Lys Gly Gly Asp Gly Gly
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 Gly Gly Glu Arg Pro Arg Leu Cys Met His Ala Cys Val Asn Thr Pro
 20 25 30
 Gly Ser Ser Arg Cys Thr Cys Pro Gly Gly Ser Glu Thr Leu Ala Asp
 35 40 45
 Gly Lys Ser Cys Glu Asn Val Asp Glu Cys Val Gly Leu Gln Pro Val
 50 55 60
 Cys Pro Gln Gly Thr Thr Cys Ile Asn Thr Gly Gly Ser Phe Gln Cys
 65 70 75 80
 Val Ser Pro Glu Cys Pro Glu Gly Ser Gly Asn Val Ser Tyr Val Lys
 85 90 95
 Thr Ser Pro Phe Gln Cys Glu Arg Asn Pro Cys Pro Met
 100 105

<210> 5689
 <211> 1897
 <212> DNA
 <213> Homo sapiens

<400> 5689
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 60

tgaacaatca gaatcataga agagtgtgag cactgggcct ttgtcttcca ggtgggacag
120
tgtgtggtgg tcttcagcca ggctcctagt gggagagccc cactcagccc cagtttgaac
180
tctgcgccat cacctatcag tgccactncc tccagctctc gttcctgaaa cccgagagta
240
ccgctctcag tctccagtaa gaagcatgga tgaagctcct tgtgttaacg gccgctgggg
300
aacactgaga cccagggctc aaaggcagac tcctcaggtt cccgggaagg gagcctttcc
360
ccagccagag gagacggctc tctatcctc aatgggtggga gtttgtctcc aggaacggca
420
gctgtgggtg gctcttcttt ggacagtcct gtacaggcca tatctccaag tactccatct
480
gctgctgaag gatacgacct gaaaatagga ctttctttgg cccccgacg aggatcaacc
540
agatcagaaa gatctgagat taggatccat agatctgaat tgggatctaa acccgcttcc
600
agtagtaatc ccattggatgg catggacaat aggacagttg ggggaagtat gagacacct
660
cctgaacaga caaatggtgt gcatacccca cctcacgtgg ccagtgcctt tgcaggggcc
720
gtctcccag gtgcctgcg tcggagtctg gaagccatca aagcgatgtc ctccaaaggc
780
ccctggcct ctgcagcact aagtcctcct cttgggtctt ctccaggctc tctggggagc
840
cagagtttga gcagtggaga aacagtgcct atccctcgcc cagggcctgc ccaaggagat
900
ggacattcct tacctcccat tgctgcgcg ctgggccacc accctccaca gtccctaaat
960
gttggcaaac ccctatacca gagtatgaac tgcaagccca tgcagatgta cgtgctggac
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1260
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1320
cagaagccaa aactctttta tcccaaccg aagtcactcc aggctgggat caaatctcca
1380
ttaagaaaaa aaattatata taaatatata tatatatatt atatagccaa ctctgttgac
1440
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1560
catcagtaac ttcccaaaag aaactgaaga gcccctgta aatctttatg tggccttctt
1620
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1680

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<210> 5690

<211> 54

<212> PRT

<213> Homo sapiens

<400> 5690

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Pro	Leu	Ser	Pro	Ser	Leu	Asn	Ser	Arg	Pro	Ser	Pro	Ile	Ser	Ala	Thr
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<211> 1227

<212> DNA

<213> Homo sapiens

<400> 5691

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<210> 5692

<211> 86

<212> PRT

<213> Homo sapiens

<400> 5692

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 35 40 45
 Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn Ser Val Val Asn Pro
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<210> 5693

<211> 389

<212> DNA

<213> Homo sapiens

<400> 5693

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 <213> Homo sapiens

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<211> 368

<212> PRT

<213> Homo sapiens

<400> 5696

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Gln	Pro	Pro	Leu	Glu	Ala	Glu	Glu	Pro	Pro	Asp	Arg	Gly	Thr	Asp	Gly
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Val	Arg	Ala	Phe	Tyr	Asp	Thr	Leu	Asp	Ala	Ala	Arg	Ser	Ser	Ile	Arg
		180					185						190		
Val	Val	Arg	Val	Glu	Arg	Val	Ser	His	Pro	Leu	Leu	Gln	Gln	Gln	Tyr
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Glu	Leu	Tyr	Arg	Glu	Arg	Leu	Leu	Gln	Arg	Cys	Glu	Arg	Arg	Pro	Val

210	215	220
Glu Gln Val Leu Tyr His Gly Thr Thr Ala Pro Ala Val Pro Asp Ile		
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Cys Ala His Gly Phe Asn Arg Ser Phe Cys Gly Arg Asn Ala Thr Val		240
	245	250
Tyr Gly Lys Gly Val Tyr Phe Ala Arg Arg Ala Ser Leu Ser Val Gln		255
	260	265
Asp Arg Tyr Ser Pro Pro Asn Ala Asp Gly His Lys Ala Val Phe Val		270
	275	280
Ala Arg Val Leu Thr Gly Asp Tyr Gly Gln Gly Arg Arg Gly Leu Arg		285
	290	295
Ala Pro Pro Leu Arg Gly Pro Gly His Val Leu Leu Arg Tyr Asp Ser		300
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Ala Val Asp Cys Ile Cys Gln Pro Ser Ile Phe Val Ile Phe His Asp		320
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Thr Gln Ala Leu Pro Thr His Leu Ile Thr Cys Glu His Val Pro Arg		335
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<210> 5697

<211> 3362

<212> DNA

<213> Homo sapiens

<400> 5697

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<210> 5698

<211> 403

<212> PRT

<213> Homo sapiens

<400> 5698

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 Cys Asp Leu Asp Ala Ile Trp Gly Ile Val Val Glu Ala Val Ala Gly
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 Ala Gly Ala Leu Ile Thr Leu Leu Leu Met Leu Ile Leu Leu Val Arg
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Gln Leu Val Gly Leu Ala Leu Cys Leu Met Leu Val Gln Val Ile Ile				160
	165		170	175
Ala Val Glu Trp Leu Val Leu Thr Val Leu Arg Asp Thr Arg Pro Ala				
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Cys Ala Tyr Glu Pro Met Asp Phe Val Met Ala Leu Ile Tyr Asp Met				
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Val Leu Leu Val Val Thr Leu Gly Leu Ala Leu Phe Thr Leu Cys Gly				
	210		215	220
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Phe Leu Ser Val Leu Ile Trp Val Ala Trp Met Thr Met Tyr Leu Phe				240
	245		250	255
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	260		265	270
Ala Ile Thr Leu Ala Ala Ser Gly Trp Val Phe Val Ile Phe His Ala				
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Glu Glu Asp Val Gln Leu Pro Arg Ala Tyr Met Glu Asn Lys Ala Phe				320
	325		330	335
Ser Met Asp Glu His Asn Ala Ala Leu Arg Thr Ala Gly Phe Pro Asn				
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Gly Ser Leu Gly Lys Arg Pro Ser Gly Ser Leu Gly Lys Arg Pro Ser				
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Ala Pro Phe Arg Ser Asn Val Tyr Gln Pro Thr Glu Met Ala Val Val				
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<210> 5699

<211> 1565

<212> DNA

<213> Homo sapiens

<400> 5699

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120

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<210> 5700

<211> 197

<212> PRT

<213> Homo sapiens

<400> 5700

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		20					25					30			
Glu	Pro	Gly	Pro	Glu	Pro	Leu	Pro	Trp	Leu	Gly	Lys	Met	Ala	Gln	Leu

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      65          70          75          80
Asn Val Thr Val Trp Ile Lys Pro Ser Gly Leu Gln Thr Asp Val Gln
      85          90          95
Lys Ile Leu Arg Asn Ala Arg Lys Leu Pro Glu Lys Thr Gln Thr Phe
      100          105          110
Tyr Lys Glu Leu Asn Arg Leu Arg Lys Ala Ala Leu Ala Phe Gly Phe
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Leu Asp Leu Leu Lys Gly Val Ala Asp Met Leu Glu Arg Glu Cys Thr
      130          135          140
Leu Leu Pro Glu Thr Ala His Pro Asp Ala Ala Phe Gln Leu Thr His
      145          150          155          160
Ala Ala Gln Gln Leu Lys Leu Ala Ser Thr Gly Thr Ser Glu Tyr Ala
      165          170          175
Ala Tyr Asp Gln Asn Ile Thr Pro Leu His Thr Asp Phe Ser Gly Ser
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Ser Thr Glu Arg Ile
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<210> 5701

<211> 1885

<212> DNA

<213> Homo sapiens

<400> 5701

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<210> 5702

<211> 348

<212> PRT

<213> Homo sapiens

<400> 5702

Met	Asp	Thr	Leu	Glu	Glu	Val	Thr	Trp	Ala	Asn	Gly	Ser	Thr	Ala	Leu
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Pro	Pro	Pro	Leu	Ala	Pro	Asn	Ile	Ser	Val	Pro	His	Arg	Cys	Leu	Leu
			20					25					30		
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		35				40					45				
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		50			55					60					
Leu	Pro	Ser	Ala	Arg	Ala	Lys	Ile	Arg	Ile	Thr	Ser	Ser	Pro	Ile	Phe


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Ile Thr Phe Tyr Ile Leu Val Phe Val Val Ala Leu Val Gly Ile Ala
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Ala Asp Lys Ile Leu Trp Glu Ile Thr Arg Phe Phe Leu Leu Ala Ile
      115          120          125
Glu Leu Ser Val Ile Ile Leu Gly Leu Ala Phe Gly His Leu Glu Ser
      130          135          140
Lys Ser Ser Ile Lys Arg Val Leu Ala Ile Thr Thr Val Leu Ser Leu
      145          150          155          160
Ala Tyr Ser Val Thr Gln Gly Thr Leu Glu Ile Leu Tyr Pro Asp Ala
      165          170          175
His Leu Ser Ala Glu Asp Phe Asn Ile Tyr Gly His Gly Gly Arg Gln
      180          185          190
Phe Trp Leu Val Ser Ser Cys Phe Phe Phe Leu Val Tyr Ser Leu Val
      195          200          205
Val Ile Leu Pro Lys Thr Pro Leu Lys Glu Arg Ile Ser Leu Pro Ser
      210          215          220
Arg Arg Ser Phe Tyr Val Tyr Ala Gly Ile Leu Ala Leu Leu Asn Leu
      225          230          235          240
Leu Gln Gly Leu Gly Ser Val Leu Leu Cys Phe Asp Ile Ile Glu Gly
      245          250          255
Leu Cys Cys Val Asp Ala Thr Thr Phe Leu Tyr Phe Ser Phe Phe Ala
      260          265          270
Pro Leu Ile Tyr Val Ala Phe Leu Arg Gly Phe Phe Gly Ser Glu Pro
      275          280          285
Lys Ile Leu Phe Xaa Leu Gln Met Pro Ser Gly Arg Asp Arg Gly Ala
      290          295          300
Arg Cys Thr Pro Thr Pro Ala Leu Arg Cys Gly Pro Ala Gly Gly Pro
      305          310          315          320
Gly Gly Cys Arg Gly Cys Trp Gly Leu Ser Cys Gln Leu Leu Glu His
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Ala Val Arg Leu Cys Arg Arg Gly Gly Leu Pro Gly
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<210> 5703

<211> 1496

<212> DNA

<213> Homo sapiens

<400> 5703

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<210> 5704

<211> 269

<212> PRT

<213> Homo sapiens

<400> 5704

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			20					25					30		
Glu	Gly	Ser	Val	Leu	Arg	Arg	Gly	Phe	Gln	Thr	Cys	Glu	His	Trp	Lys
			35				40					45			
Gln	Ile	Phe	Met	Glu	Ile	Val	Gly	Val	Gln	Ser	Ala	Leu	Cys	Gly	Leu
			50				55				60				
Val	Leu	Ser	Leu	Leu	Ile	Cys	Val	Ala	Ala	Val	Ala	Val	Phe	Thr	Thr

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65              70              75              80
His Ile Leu Leu Leu Leu Pro Val Leu Leu Ser Ile Leu Gly Ile Val
              85              90              95
Cys Leu Val Val Thr Ile Met Tyr Trp Ser Gly Trp Glu Met Gly Ala
100              105              110
Val Glu Ala Ile Ser Leu Ser Ile Leu Val Gly Ser Ser Val Asp Tyr
115              120              125
Cys Val His Leu Val Glu Gly Tyr Leu Leu Ala Gly Glu Asn Leu Pro
130              135              140
Pro His Gln Ala Glu Asp Ala Arg Thr Gln Arg Gln Trp Arg Thr Leu
145              150              155              160
Glu Ala Val Arg His Val Gly Val Ala Ile Val Ser Ser Ala Leu Thr
165              170              175
Thr Val Ile Ala Thr Val Pro Leu Phe Phe Cys Ile Ile Ala Pro Phe
180              185              190
Ala Lys Phe Gly Lys Ile Val Ala Leu Asn Thr Gly Val Ser Ile Leu
195              200              205
Tyr Thr Leu Thr Val Ser Thr Ala Leu Leu Gly Ile Met Ala Pro Ser
210              215              220
Ser Phe Thr Arg Thr Arg Thr Ser Phe Leu Lys Ala Leu Gly Ala Val
225              230              235              240
Leu Leu Ala Gly Ala Leu Gly Leu Gly Ala Cys Leu Val Leu Leu Gln
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Ser Gly Tyr Lys Ile Pro Leu Pro Ala Gly Ala Ser Leu
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<210> 5705

<211> 768

<212> DNA

<213> Homo sapiens

<400> 5705

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660

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<210> 5706
<211> 202
<212> PRT
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<400> 5706
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35 40 45
His Thr Asn Arg Thr Thr Ser Trp Ile Asp Pro Arg Asp Arg Tyr Thr
50 55 60
Lys Pro Leu Thr Phe Ala Asp Cys Ile Ser Asp Glu Leu Pro Leu Gly
65 70 75 80
Trp Glu Glu Ala Tyr Asp Pro Gln Val Gly Asp Tyr Phe Ile Asp His
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Asn Thr Lys Thr Thr Gln Ile Glu Asp Pro Arg Val Gln Trp Arg Arg
100 105 110
Glu Gln Glu His Met Leu Lys Asp Tyr Leu Val Val Ala Gln Glu Ala
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130 135 140
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145 150 155 160
Leu Gly Ser Gln Val Ser Leu Val Ser Gly Ser Ser Ser Ser Lys
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<210> 5707
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<212> DNA
<213> Homo sapiens

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<210> 5708

<211> 506

<212> PRT

<213> Homo sapiens

<400> 5708

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Glu	Val	Thr	Glu	Glu	Asn	Val	Gln	Val	Leu	Leu	Pro	Ala	Ala	Ser	Leu
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Leu	Gln	Leu	Met	Asp	Val	Arg	Gln	Asn	Cys	Cys	Asp	Phe	Leu	Gln	Ser
			50			55					60				
Gln	Leu	His	Pro	Thr	Asn	Cys	Leu	Gly	Ile	Arg	Ala	Phe	Ala	Asp	Val
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His	Thr	Cys	Thr	Asp	Leu	Leu	Gln	Gln	Ala	Asn	Ala	Tyr	Ala	Glu	Gln
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His	Phe	Pro	Glu	Val	Met	Leu	Gly	Glu	Glu	Phe	Leu	Ser	Leu	Ser	Leu
			100					105					110		
Asp	Gln	Val	Cys	Ser	Leu	Ile	Ser	Ser	Asp	Lys	Leu	Thr	Val	Ser	Ser
			115					120					125		
Glu	Glu	Lys	Val	Phe	Glu	Ala	Val	Ile	Ser	Trp	Ile	Asn	Tyr	Glu	Lys
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Glu	Thr	Arg	Leu	Glu	His	Met	Ala	Lys	Leu	Met	Glu	His	Val	Arg	Leu
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Pro	Leu	Leu	Pro	Arg	Asp	Tyr	Leu	Val	Gln	Thr	Val	Glu	Glu	Glu	Ala
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Leu	Ile	Lys	Asn	Asn	Asn	Thr	Cys	Lys	Asp	Phe	Leu	Ile	Glu	Ala	Met
			180					185					190		
Lys	Tyr	His	Leu	Leu	Pro	Leu	Asp	Gln	Arg	Leu	Leu	Ile	Lys	Asn	Pro
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Arg	Thr	Lys	Pro	Arg	Thr	Pro	Val	Ser	Leu	Pro	Lys	Val	Met	Ile	Val
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Phe	Glu	Glu	Asp	Arg	Trp	Asp	Gln	Ile	Ala	Glu	Leu	Pro	Ser	Arg	Arg
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Cys	Arg	Ala	Gly	Val	Val	Phe	Met	Ala	Gly	His	Val	Tyr	Ala	Val	Gly
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Gly	Phe	Asn	Gly	Ser	Leu	Arg	Val	Arg	Thr	Val	Asp	Val	Tyr	Asp	Gly
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Val	Lys	Asp	Gln	Trp	Thr	Ser	Ile	Ala	Ser	Met	Gln	Glu	Arg	Arg	Ser
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Thr	Leu	Gly	Ala	Ala	Val	Leu	Asn	Asp	Leu	Leu	Tyr	Ala	Val	Gly	Gly

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Thr	Asn	Glu	Trp	Phe	Phe	Val	Ala	Pro	Met	Asn	Thr	Arg	Arg	Ser	Ser	
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Val	Gly	Val	Gly	Val	Val	Glu	Gly	Lys	Leu	Tyr	Ala	Val	Gly	Gly	Tyr	
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Asp	Gly	Ala	Ser	Arg	Gln	Cys	Leu	Ser	Thr	Val	Glu	Gln	Tyr	Asn	Pro	
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Ala	Thr	Asn	Glu	Trp	Ile	Tyr	Val	Ala	Asp	Met	Ser	Thr	Arg	Arg	Ser	
				385				390				395				
Gly	Ala	Gly	Val	Gly	Val	Leu	Ser	Gly	Gln	Leu	Tyr	Ala	Thr	Gly	Gly	
				405				410				415				
His	Asp	Gly	Pro	Leu	Val	Arg	Lys	Ser	Val	Glu	Val	Tyr	Asp	Pro	Gly	
				420				425				430				
Thr	Asn	Thr	Trp	Lys	Gln	Val	Ala	Asp	Met	Asn	Met	Cys	Arg	Arg	Asn	
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Ala	Gly	Val	Cys	Ala	Val	Asn	Gly	Leu	Leu	Tyr	Val	Val	Gly	Gly	Asp	
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Asp	Gly	Ser	Cys	Asn	Leu	Ala	Ser	Val	Glu	Tyr	Tyr	Asn	Pro	Val	Thr	
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Asp	Lys	Trp	Thr	Leu	Leu	Pro	Thr	Asn	Met	Ser	Thr	Gly	Arg	Ser	Tyr	
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<210> 5709

<211> 1805

<212> DNA

<213> Homo sapiens

<400> 5709

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480					
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540					
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<210> 5710

<211> 441

<212> PRT

<213> Homo sapiens

<400> 5710

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 35 40 45
 Ala Phe Asp Gly Leu Ala Ser Leu Val Glu Leu Asn Leu Ala His Asn

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Asn Leu Ser Ser Leu Pro His Asp Leu Phe Thr Pro Leu Arg Tyr Leu				
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Val Glu Leu His Leu His His Asn Pro Trp Asn Cys Asp Cys Asp Ile				
	85		90	95
Leu Trp Leu Ala Trp Trp Leu Arg Glu Tyr Ile Pro Thr Asn Ser Thr				
	100		105	110
Cys Cys Gly Arg Cys His Ala Pro Met His Met Arg Gly Arg Tyr Leu				
	115		120	125
Val Glu Val Asp Gln Ala Ser Phe Gln Cys Ser Ala Pro Phe Ile Met				
	130		135	140
Asp Ala Pro Arg Asp Leu Asn Ile Ser Glu Gly Arg Met Ala Glu Leu				
	145		150	155
Lys Cys Arg Thr Pro Pro Met Ser Ser Val Lys Trp Leu Leu Pro Asn				
	165		170	175
Gly Thr Val Leu Ser His Ala Ser Arg His Pro Arg Ile Ser Val Leu				
	180		185	190
Asn Asp Gly Thr Leu Asn Phe Ser His Val Leu Leu Ser Asp Thr Gly				
	195		200	205
Val Tyr Thr Cys Met Val Thr Asn Val Ala Gly Asn Ser Asn Ala Ser				
	210		215	220
Ala Tyr Leu Asn Val Ser Thr Ala Glu Leu Asn Thr Ser Asn Tyr Ser				
	225		230	235
Phe Phe Thr Thr Val Thr Val Glu Thr Thr Glu Ile Ser Pro Glu Asp				
	245		250	255
Thr Thr Arg Lys Tyr Lys Pro Val Pro Thr Thr Ser Thr Gly Tyr Gln				
	260		265	270
Pro Ala Tyr Thr Thr Ser Thr Thr Val Leu Ile Gln Thr Thr Arg Val				
	275		280	285
Pro Lys Gln Val Ala Val Pro Ala Thr Asp Thr Thr Asp Lys Met Gln				
	290		295	300
Thr Ser Leu Asp Glu Val Met Lys Thr Thr Lys Ile Ile Ile Gly Cys				
	305		310	315
Phe Val Ala Val Thr Leu Leu Ala Ala Ala Met Leu Ile Val Phe Tyr				
	325		330	335
Lys Leu Arg Lys Arg His Gln Gln Arg Ser Thr Val Thr Ala Ala Arg				
	340		345	350
Thr Val Glu Ile Ile Gln Val Asp Glu Asp Ile Pro Ala Ala Thr Ser				
	355		360	365
Ala Ala Ala Thr Ala Ala Pro Ser Gly Val Ser Gly Glu Gly Ala Val				
	370		375	380
Val Leu Pro Thr Ile His Asp His Ile Asn Tyr Asn Thr Tyr Lys Pro				
	385		390	395
Ala His Gly Ala His Trp Thr Glu Asn Ser Leu Gly Asn Ser Leu His				
	405		410	415
Pro Thr Val Thr Thr Ile Ser Glu Pro Tyr Ile Ile Gln Thr His Thr				
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Lys Asp Lys Val Gln Glu Thr Gln Ile				
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<210> 5711

<211> 1142

<212> DNA

<213> Homo sapiens

<400> 5711

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<210> 5712

<211> 145

<212> PRT

<213> Homo sapiens

<400> 5712

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		20						25				30			
Tyr	Tyr	Leu	Ile	Gln	Lys	Phe	His	Ser	Arg	Ala	Leu	Tyr	Tyr	Lys	Leu
		35					40					45			

Ala Val Glu Gln Leu Gln Ser His Pro Glu Ala Gln Glu Ala Leu Gly
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 Pro Pro Leu Asn Ile His Tyr Leu Lys Leu Ile Asp Arg Glu Asn Phe
 65 70 75 80
 Val Asp Ile Val Asp Ala Lys Leu Lys Ile Pro Val Ser Gly Ser Lys
 85 90 95
 Ser Glu Gly Leu Leu Tyr Val His Ser Ser Arg Gly Gly Pro Phe Gln
 100 105 110
 Arg Trp His Leu Asp Glu Val Phe Leu Glu Leu Lys Asp Gly Gln Gln
 115 120 125
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<210> 5713
 <211> 1996
 <212> DNA
 <213> Homo sapiens

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 1860
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 1980
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<210> 5714

<211> 408

<212> PRT

<213> Homo sapiens

<400> 5714

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 Val Ser Glu Phe Phe Met Asn Ala Lys Lys Asn Lys Pro Glu Trp Arg
 35 40 45
 Glu Glu Gln Met Ala Ser Ile Lys Lys Asp Tyr Tyr Lys Ala Leu Glu
 50 55 60
 Asp Ala Asp Glu Lys Val Gln Leu Ala Asn Gln Ile Tyr Asp Leu Val
 65 70 75 80
 Asp Arg His Leu Arg Lys Leu Asp Gln Glu Leu Ala Lys Phe Lys Met

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      115              120              125
His Ser His Thr Pro Val Glu Lys Arg Lys Tyr Asn Pro Thr Ser His
      130              135              140
His Thr Thr Thr Asp His Ile Pro Glu Lys Lys Phe Lys Ser Glu Ala
      145              150              155              160
Leu Leu Ser Thr Leu Thr Ser Asp Ala Ser Lys Glu Asn Thr Leu Gly
      165              170              175
Cys Arg Asn Asn Asn Ser Thr Ala Ser Ser Asn Asn Ala Tyr Asn Val
      180              185              190
Asn Ser Ser Gln Pro Leu Gly Ser Tyr Asn Ile Gly Ser Leu Ser Ser
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Gly Thr Gly Ala Gly Ala Ile Thr Met Ala Ala Ala Gln Ala Val Gln
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      225              230              235              240
Ser Tyr Glu Ala Phe Lys Asn Asn Asp Phe Gln Leu Gly Lys Glu Phe
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Ser Met Ala Arg Glu Thr Val Gly Tyr Ser Ser Ser Ser Ala Leu Met
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Thr Thr Leu Thr Gln Asn Ala Ser Ser Ser Ala Ala Asp Ser Arg Ser
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Gly Arg Lys Ser Lys Asn Asn Asn Lys Ser Ser Ser Gln Gln Ser Ser
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Ser Asn Ser Gln Val Asp Trp Thr Tyr Asp Pro Asn Glu Pro Arg Tyr
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Cys Ile Cys Asn Gln Val Ser Tyr Gly Glu Met Val Gly Cys Asp Asn
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Gln Asp Cys Pro Ile Glu Trp Phe His Tyr Gly Cys Val Gly Leu Thr
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<210> 5715

<211> 1458

<212> DNA

<213> Homo sapiens

<400> 5715

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<210> 5716

<211> 148

<212> PRT

<213> Homo sapiens

<400> 5716

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Glu	Cys	Leu	His	Thr	Phe	Cys	Lys	Ser	Cys	Ile	Val	Lys	Tyr	Leu	Gln				
		35					40					45							
Thr	Ser	Lys	Tyr	Cys	Pro	Met	Cys	Asn	Ile	Lys	Ile	His	Glu	Thr	Gln				
	50					55					60								
Pro	Leu	Leu	Asn	Leu	Lys	Leu	Asp	Arg	Val	Met	Gln	Asp	Ile	Val	Tyr				
65					70					75					80				
Lys	Leu	Val	Pro	Gly	Leu	Gln	Asp	Ser	Glu	Glu	Lys	Arg	Ile	Arg	Glu				
			85						90					95					
Phe	Tyr	Gln	Ser	Arg	Gly	Leu	Asp	Arg	Val	Thr	Gln	Pro	Thr	Gly	Glu				
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Glu	Pro	Ala	Leu	Ser	Asn	Leu	Gly	Leu	Pro	Phe	Ser	Ser	Phe	Asp	His				
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Ser	Lys	Ala	His	Tyr	Tyr	Arg	Tyr	Asp	Glu	Gln	Leu	Asn	Leu	Cys	Leu				
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<210> 5718

<211> 228

<212> PRT

<213> Homo sapiens

<400> 5718

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Leu	Leu	Met	Leu	Gly	Val	Thr	Leu	Pro	Asn	Ser	Tyr	Trp	Arg	Val	Ser
			20					25					30		
Thr	Val	His	Gly	Asn	Val	Ile	Thr	Thr	Asn	Thr	Ile	Phe	Glu	Asn	Leu
		35					40					45			
Trp	Phe	Ser	Cys	Ala	Thr	Asp	Ser	Leu	Gly	Val	Tyr	Asn	Cys	Trp	Glu
	50					55				60					
Phe	Pro	Ser	Met	Leu	Ala	Leu	Ser	Gly	Tyr	Ile	Gln	Ala	Cys	Arg	Ala
65				70					75					80	
Leu	Met	Ile	Thr	Ala	Ile	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Leu	Leu	Gly
				85				90						95	
Ile	Ala	Gly	Leu	Arg	Cys	Thr	Asn	Ile	Gly	Gly	Leu	Glu	Leu	Ser	Arg
			100					105						110	
Lys	Ala	Lys	Leu	Ala	Ala	Thr	Ala	Gly	Ala	Leu	His	Ile	Leu	Ala	Gly
			115				120						125		
Ile	Cys	Gly	Met	Val	Ala	Ile	Ser	Trp	Tyr	Ala	Phe	Asn	Ile	Thr	Arg
	130					135					140				
Asp	Phe	Phe	Asp	Pro	Leu	Tyr	Pro	Gly	Thr	Lys	Tyr	Glu	Leu	Gly	Pro
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Ala	Leu	Tyr	Leu	Gly	Trp	Ser	Ala	Ser	Leu	Ile	Ser	Ile	Leu	Gly	Gly
			165					170						175	
Leu	Cys	Leu	Cys	Ser	Ala	Cys	Cys	Cys	Gly	Ser	Asp	Glu	Asp	Pro	Ala
			180					185						190	
Ala	Ser	Ala	Arg	Arg	Pro	Tyr	Gln	Ala	Pro	Val	Ser	Val	Met	Pro	Val
		195					200						205		
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<210> 5719

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5719

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180
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<210> 5720

<211> 455

<212> PRT

<213> Homo sapiens

<400> 5720

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Gln	Gln	Gln	Arg	Gly	His	Gly	Ala	Val	His	Ala	Ala	Gly	Gln	Gly	Ala
			20					25					30		
His	Asp	Val	Pro	Gln	Gly	Leu	His	Pro	Pro	Val	Ala	Pro	Ser	Gly	Gly
		35					40				45				
Val	Asp	Ser	Ala	Val	Ala	Ala	Leu	Leu	Leu	Arg	Arg	Arg	Gly	Tyr	Gln
	50					55				60					
Val	Thr	Gly	Val	Phe	Met	Lys	Asn	Trp	Asp	Ser	Leu	Asp	Glu	His	Gly
65					70				75					80	
Val	Cys	Thr	Ala	Asp	Lys	Asp	Cys	Glu	Asp	Ala	Tyr	Arg	Val	Cys	Gln
			85					90					95		
Ile	Leu	Asp	Ile	Pro	Phe	His	Gln	Val	Ser	Tyr	Val	Lys	Glu	Tyr	Trp
		100					105					110			
Asn	Asp	Val	Phe	Ser	Asp	Phe	Leu	Asn	Glu	Tyr	Glu	Lys	Gly	Arg	Thr
	115						120				125				
Pro	Asn	Pro	Asp	Ile	Val	Cys	Asn	Lys	His	Ile	Lys	Phe	Ser	Cys	Phe

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      130              135              140
Phe His Tyr Ala Val Asp Asn Leu Gly Ala Asp Ala Ile Ala Thr Gly
145              150              155              160
His Tyr Ala Arg Thr Ser Leu Glu Asp Glu Glu Val Phe Glu Gln Lys
      165              170              175
His Val Lys Lys Pro Glu Gly Leu Phe Arg Asn Arg Phe Glu Val Arg
      180              185              190
Asn Ala Val Lys Leu Leu Gln Ala Ala Asp Ser Phe Lys Asp Gln Thr
      195              200              205
Phe Phe Leu Ser Gln Val Ser Gln Asp Ala Leu Arg Arg Thr Ile Phe
      210              215              220
Pro Leu Gly Gly Leu Thr Lys Glu Phe Val Lys Lys Ile Ala Ala Glu
225              230              235              240
Asn Arg Leu His His Val Leu Gln Lys Lys Glu Ser Met Gly Met Cys
      245              250              255
Phe Ile Gly Lys Arg Asn Phe Glu His Phe Leu Leu Gln Tyr Leu Gln
      260              265              270
Pro Arg Pro Gly His Phe Ile Ser Ile Glu Asp Asn Lys Val Leu Gly
      275              280              285
Thr His Lys Gly Trp Phe Leu Tyr Thr Leu Gly Gln Arg Ala Asn Ile
      290              295              300
Gly Gly Leu Arg Glu Pro Trp Tyr Val Val Glu Lys Asp Ser Val Lys
305              310              315              320
Gly Asp Val Phe Val Ala Pro Arg Thr Asp His Pro Ala Leu Tyr Arg
      325              330              335
Asp Leu Leu Arg Thr Ser Arg Val His Trp Ile Ala Glu Glu Pro Pro
      340              345              350
Ala Ala Leu Val Arg Asp Lys Met Met Glu Cys His Phe Arg Phe Arg
      355              360              365
His Gln Met Ala Leu Val Pro Cys Val Leu Thr Leu Asn Gln Asp Gly
      370              375              380
Thr Val Trp Val Thr Ala Val Gln Ala Val Arg Ala Leu Ala Thr Gly
385              390              395              400
Gln Phe Ala Val Phe Tyr Lys Gly Asp Glu Cys Leu Gly Ser Gly Lys
      405              410              415
Ile Leu Arg Leu Gly Pro Ser Ala Tyr Thr Leu Gln Lys Gly Gln Arg
      420              425              430
Arg Ala Gly Met Ala Thr Glu Ser Pro Ser Asp Ser Pro Glu Asp Gly
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Pro Gly Leu Ser Pro Leu Leu
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<210> 5721

<211> 400

<212> DNA

<213> Homo sapiens

<400> 5721

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120
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180

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 300
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<210> 5722

<211> 80

<212> PRT

<213> Homo sapiens

<400> 5722

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Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His	Glu	Lys	Gly	Arg
			20					25					30		
Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu	Pro	Cys	Leu	Leu
		35					40					45			
Asp	Ala	Asp	Lys	Tyr	Phe	Trp	Trp	Ala	Leu	Leu	Tyr	Leu	Val	Asn	Thr
	50					55					60				
Ser	Phe	Lys	Glu	Asp	Gly	Pro	Asp	Tyr	Thr	Glu	His	Leu	Pro	Cys	Pro
65					70					75				80	

<210> 5723

<211> 376

<212> DNA

<213> Homo sapiens

<400> 5723

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 180
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<210> 5724

<211> 125

<212> PRT

<213> Homo sapiens

<400> 5724

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      20           25           30
Met Gly Val Pro Glu Val Trp Gly Leu Leu Ser Lys Glu Trp Trp His
      35           40           45
Ala Gly Leu Ser Gly Ala Met Trp His Gly Trp Trp Ala Ser Ile Cys
      50           55           60
Ser Gly Cys Leu Leu Ser Asp Glu Gly Thr Gly Cys Pro Cys Leu Pro
      65           70           75           80
Gln His Ala Pro Cys Pro Ala Cys Pro Leu Pro Cys Met Ser Pro Val
      85           90           95
Leu His Ile Pro Cys Pro Ala Gly Pro Ile Leu Ser Cys Met Ser Pro
      100          105          110
Val Leu His Met Pro Cys Pro Ala Leu Leu Leu His Ala
      115          120          125

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<210> 5725

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 5725

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960

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<210> 5726

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5726

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			20					25					30		
Ser	Arg	Pro	Pro	Gly	Ser	Arg	Pro	Thr	Ala	His	Gly	Arg	Ala	Trp	Gly
		35					40					45			
Ala	Ser	Arg	Ala	Arg	Arg	Pro	Ala	Pro	Gly	Gly	Pro	Phe	Pro	Gly	Val
	50					55					60				
Ser	Thr	Asp	Asp	Ser	Ala	Val	Pro	Pro	Pro	Gly	Gly	Ala	Pro	His	Phe
65					70					75				80	
Gly	His	Tyr	Arg	Thr	Gly	Gly	Gly	Ala	Met	Gly	Leu	Arg	Ser	Ala	Ser
			85						90				95		
Val	Ser	Ser	Val	Ala	Gly	Met	Gly	Met	Asp	Pro	Ser	Thr	Ala	Gly	Gly
			100					105					110		
Val	Pro	Phe	Gly	Leu	Tyr	Thr	Pro	Ala	Ser	Arg	Gly	Thr	Gly	Asp	Ser
	115						120					125			
Glu	Arg	Ala	Pro	Gly	Gly	Gly	Gly	Ser	Ala	Ser	Asp	Ser	Thr	Tyr	Ala
	130				135						140				
His	Gly	Asn	Gly	Tyr	Gln	Glu	Thr	Gly	Gly	Gly	His	His	Arg	Asp	Gly
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Met	Leu	Tyr	Leu	Gly	Ser	Arg	Ala	Ser	Leu	Ala	Asp	Ala	Leu	Pro	Leu
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His	Ile	Ala	Pro	Arg	Trp	Phe	Ser	Ser	His	Ser	Gly	Phe	Lys	Cys	Pro
		180						185					190		
Ile	Cys	Ser	Lys	Ser	Val	Ala	Ser	Asp	Glu	Met	Glu	Met	His	Phe	Ile
	195						200				205				
Met	Cys	Leu	Ser	Lys	Pro	Arg	Leu	Ser	Tyr	Asn	Asp	Asp	Val	Leu	Thr
	210				215						220				
Lys	Asp	Ala	Gly	Glu	Cys	Val	Ile	Cys	Leu	Glu	Glu	Leu	Leu	Gln	Gly
225					230					235				240	
Asp	Thr	Ile	Ala	Arg	Leu	Pro	Cys	Leu	Cys	Ile	Tyr	His	Lys	Ser	Cys
			245						250				255		
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<210> 5727

<211> 1237

<212> DNA

<213> Homo sapiens

<400> 5727

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120
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1237

<210> 5728

<211> 368

<212> PRT

<213> Homo sapiens

<400> 5728

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Lys Tyr Arg Asp Ile Asp Glu Asp Glu Ile Leu Arg Thr Leu Ser Pro			
35	40	45	
Glu Glu Leu Glu Gln Leu Asp Cys Glu Leu Gln Glu Met Asp Pro Glu			
50	55	60	
Asn Met Leu Leu Pro Ala Gly Leu Arg Gln Arg Asp Gln Thr Lys Lys			
65	70	75	80
Ser Pro Thr Gly Pro Leu Asp Arg Glu Ala Leu Leu Gln Tyr Leu Glu			
85	90	95	
Gln Gln Ala Leu Glu Val Lys Glu Arg Asp Asp Leu Val Pro Phe Thr			
100	105	110	
Gly Glu Lys Lys Gly Lys Pro Tyr Ile Gln Pro Lys Arg Glu Ile Pro			
115	120	125	
Ala Glu Glu Gln Ile Thr Leu Glu Pro Glu Leu Glu Glu Ala Leu Ala			
130	135	140	
His Ala Thr Asp Ala Glu Met Cys Asp Ile Ala Ala Ile Leu Asp Met			
145	150	155	160
Tyr Thr Leu Met Ser Asn Lys Gln Tyr Tyr Asp Ala Leu Cys Ser Gly			
165	170	175	
Glu Ile Cys Asn Thr Glu Gly Ile Ser Ser Val Val Gln Pro Asp Lys			
180	185	190	
Tyr Lys Pro Val Pro Asp Glu Pro Pro Asn Pro Thr Asn Ile Glu Glu			
195	200	205	
Ile Leu Lys Arg Val Arg Ser Asn Asp Lys Glu Leu Glu Glu Val Asn			
210	215	220	
Leu Asn Asn Ile Gln Asp Ile Pro Ile Pro Met Leu Ser Glu Leu Cys			
225	230	235	240
Glu Ala Met Lys Ala Asn Thr Tyr Val Arg Ser Phe Ser Leu Val Ala			
245	250	255	
Thr Arg Ser Gly Asp Pro Ile Ala Asn Ala Val Ala Asp Met Leu Arg			
260	265	270	
Glu Asn Arg Ser Leu Gln Ser Leu Asn Ile Glu Ser Asn Phe Ile Ser			
275	280	285	
Ser Thr Gly Leu Met Ala Val Leu Lys Ala Val Arg Glu Asn Ala Thr			
290	295	300	
Leu Thr Glu Leu Arg Val Asp Asn Gln Arg Gln Trp Pro Gly Asp Ala			
305	310	315	320
Val Glu Met Glu Met Ala Thr Val Leu Glu Gln Cys Pro Ser Ile Val			
325	330	335	
Arg Phe Gly Tyr His Phe Thr Gln Gln Gly Pro Arg Ala Arg Ala Ala			
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<210> 5729

<211> 381

<212> DNA

<213> Homo sapiens

<400> 5729

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 180
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 240
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<210> 5730

<211> 64

<212> PRT

<213> Homo sapiens

<400> 5730

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Ala	Gly	Gly	His	Ser	Pro	Ala	Cys	Val	Ser	Gly	Val	Pro	Pro	Gly	Pro
			20					25				30			
Ser	Ser	Ala	Gly	Thr	Ala	Ser	Ser	Ser	Pro	Ala	Ser	Gly	Thr	Cys	Gly
			35				40					45			
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<210> 5731

<211> 891

<212> DNA

<213> Homo sapiens

<400> 5731

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 420
 aagatgaggg ggggcttctg gccggcgctg aggatgaact ggcgggtgtg gacgccacta
 480
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 660
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 780
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<210> 5732

<211> 193

<212> PRT

<213> Homo sapiens

<400> 5732

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Arg	Arg	Ala	Leu	Ala	Gln	Tyr	Leu	Leu	Phe	Leu	Arg	Leu	Tyr	Pro	Val
		20					25						30		
Leu	Thr	Lys	Ala	Ala	Thr	Ser	Gly	Ile	Leu	Ser	Ala	Leu	Gly	Asn	Phe
		35					40						45		
Leu	Ala	Gln	Met	Ile	Glu	Lys	Lys	Arg	Lys	Lys	Glu	Asn	Ser	Arg	Ser
		50					55				60				
Leu	Asp	Val	Gly	Gly	Pro	Leu	Arg	Tyr	Ala	Val	Tyr	Gly	Phe	Phe	Phe
65					70					75					80
Thr	Gly	Pro	Leu	Ser	His	Phe	Phe	Tyr	Phe	Phe	Met	Glu	His	Trp	Ile
				85					90					95	
Pro	Pro	Glu	Val	Pro	Leu	Ala	Gly	Leu	Arg	Arg	Leu	Leu	Leu	Asp	Arg
			100					105						110	
Leu	Val	Phe	Ala	Pro	Ala	Phe	Leu	Met	Leu	Phe	Phe	Leu	Ile	Met	Asn
		115					120						125		
Phe	Leu	Glu	Gly	Lys	Asp	Ala	Ser	Ala	Phe	Ala	Ala	Lys	Met	Arg	Gly
		130				135							140		
Gly	Phe	Trp	Pro	Ala	Leu	Arg	Met	Asn	Trp	Arg	Val	Trp	Thr	Pro	Leu
145					150					155					160
Gln	Phe	Ile	Asn	Ile	Asn	Tyr	Val	Pro	Leu	Lys	Phe	Arg	Val	Leu	Phe
			165						170					175	
Ala	Asn	Leu	Ala	Ala	Leu	Phe	Trp	Tyr	Ala	Tyr	Leu	Ala	Ser	Leu	Gly
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Lys

<210> 5733

<211> 950

<212> DNA

<213> Homo sapiens

<400> 5733

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 360
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 420
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 780
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 840
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<210> 5734
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 5734
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 20 25 30
 Leu Cys Leu Leu Phe Ala Lys Leu Val Ser Tyr Thr Phe Leu Phe Trp
 35 40 45
 Leu Pro Leu Tyr Ile Thr Asn Val Asp His Leu Asp Ala Lys Lys Ala
 50 55 60
 Gly Cys Thr Gly Ser Pro Asp Pro Leu Arg His Ser Ser His Arg Thr
 65 70 75 80
 Ser Lys

<210> 5735
 <211> 4241
 <212> DNA
 <213> Homo sapiens

<400> 5735

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120
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180
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240
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300
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360
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420
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720
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<211> 327

<212> PRT

<213> Homo sapiens

<400> 5736

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			20					25					30		
Thr	Val	Arg	Gly	Glu	Arg	Ser	Tyr	Ser	Trp	Gly	Met	Ala	Val	Asn	Val
			35					40					45		
Tyr	Ser	Thr	Ser	Ile	Thr	Gln	Glu	Thr	Met	Ser	Arg	His	Asp	Ile	Ile
			50					55				60			
Ala	Trp	Val	Asn	Asp	Ile	Val	Ser	Leu	Asn	Tyr	Thr	Lys	Val	Glu	Gln
Leu	Cys	Ser	Gly	Ala	Ala	Tyr	Cys	Gln	Phe	Met	Asp	Met	Leu	Phe	Pro
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<212> DNA
<213> Homo sapiens
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240
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<210> 5738
<211> 99
<212> PRT
<213> Homo sapiens
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<400> 5738

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Gln His Leu Pro Leu Arg Leu Gln Leu Pro Ser Gln Val His Gln Glu
 20           25           30
Thr Thr Gly His His Trp Gln Trp Arg Gly Asp Met Glu His Gly Leu
 35           40           45
Gly Ser Arg Leu Leu Ala Pro Asp Val Gln Pro Gln Thr Pro Pro Val
 50           55           60
Met Gly Glu Val Trp Arg Pro Val Gln Leu Ser Gln Gly His Ala His
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Leu Ser Leu Gly Ser Val Gly Lys Ala Tyr Pro Lys Ser His Ile Gln
 85           90           95
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<210> 5739

<211> 780

<212> DNA

<213> Homo sapiens

<400> 5739

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120
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<210> 5740

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5740

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Met Ile Arg Lys Gln Ser Gln His His Gly Pro Ser Leu Ser Met Ser
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Ser Lys Pro Cys Gln Ala Leu Gln Leu Ser Thr Leu Pro Ser Gly
      20           25           30
Leu Pro Val Cys Gly Gly Gln Lys Arg Lys Thr Thr Gln Gly Glu Cys
      35           40           45
Leu Leu Pro Pro Ala Gly Lys Gln Leu Gly His His Leu Ser Glu Ser
      50           55           60
Arg Cys Cys Ser Ser Trp Gln Gln Ser His Ser Glu Arg Ser Cys Val
      65           70           75           80
His Cys Leu Ser Gly Arg Pro Cys Gln Ser Pro Ser Leu Pro Pro Pro
      85           90           95
Tyr Leu Cys Arg Lys Pro Gly His His His Phe Lys Ala Leu Pro Ser
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Phe Leu Gly Arg Ala Gln Pro Gln
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<210> 5741

<211> 2444

<212> DNA

<213> Homo sapiens

<400> 5741

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120
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720
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780
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900

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<210> 5742

<211> 427
 <212> PRT
 <213> Homo sapiens

<400> 5742

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 20           25           30
Gly Ala Gly Tyr Asn Ser Glu Asp Glu Tyr Glu Ala Ala Ala Ala Arg
 35           40           45
Ile Glu Ala Met Asp Pro Ala Thr Val Glu Gln Gln Glu His Trp Phe
 50           55           60
Glu Lys Ala Leu Arg Asp Lys Lys Gly Phe Ile Ile Lys Gln Met Lys
 65           70           75           80
Glu Asp Gly Ala Cys Leu Phe Arg Ala Val Ala Asp Gln Val Tyr Gly
 85           90           95
Asp Gln Asp Met His Glu Val Val Arg Lys His Cys Met Asp Tyr Leu
100           105           110
Met Lys Asn Ala Asp Tyr Phe Ser Asn Tyr Val Thr Glu Asp Phe Thr
115           120           125
Thr Tyr Ile Asn Arg Lys Arg Lys Asn Asn Cys His Gly Asn His Ile
130           135           140
Glu Met Gln Ala Met Ala Glu Met Tyr Asn Arg Pro Val Glu Val Tyr
145           150           155           160
Gln Tyr Ser Thr Glu Pro Ile Asn Thr Phe His Gly Ile His Gln Asn
165           170           175
Glu Asp Glu Pro Ile Arg Val Ser Tyr His Arg Asn Ile His Tyr Asn
180           185           190
Ser Val Val Asn Pro Asn Lys Ala Thr Ile Gly Val Gly Leu Gly Leu
195           200           205
Pro Ser Phe Lys Pro Gly Phe Ala Glu Gln Ser Leu Met Lys Asn Ala
210           215           220
Ile Lys Thr Ser Glu Glu Ser Trp Ile Glu Gln Gln Met Leu Glu Asp
225           230           235           240
Lys Lys Arg Ala Thr Asp Trp Glu Ala Thr Asn Glu Ala Ile Glu Glu
245           250           255
Gln Val Ala Arg Glu Ser Tyr Leu Gln Trp Leu Arg Asp Gln Glu Lys
260           265           270
Gln Ala Arg Gln Val Arg Gly Pro Ser Gln Pro Arg Lys Ala Ser Ala
275           280           285
Thr Cys Ser Ser Ala Thr Ala Ala Ala Ser Ser Gly Leu Glu Glu Trp
290           295           300
Thr Ser Arg Ser Pro Arg Gln Arg Ser Ser Ala Ser Ser Pro Glu His
305           310           315           320
Pro Glu Leu His Ala Glu Leu Gly Met Lys Pro Pro Ser Pro Gly Thr
325           330           335
Val Leu Ala Leu Ala Lys Pro Pro Ser Pro Cys Ala Pro Gly Thr Ser
340           345           350
Ser Gln Phe Ser Ala Gly Ala Asp Arg Ala Thr Ser Pro Leu Val Ser
355           360           365
Leu Tyr Pro Ala Leu Glu Cys Arg Ala Leu Ile Gln Gln Met Ser Pro
370           375           380
Ser Ala Phe Gly Leu Asn Asp Trp Asp Asp Asp Glu Ile Leu Ala Ser

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385 390 395 400
 Val Leu Ala Val Ser Gln Gln Glu Tyr Leu Asp Ser Met Lys Lys Asn
 405 410 415
 Lys Val His Arg Asp Pro Pro Pro Asp Lys Ser
 420 425

<210> 5743
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 5743
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 180
 gcggtggagc cacatgtcct gcggtcccgg tatccagtct gggcaggaag cagcggggcg
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 300
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 420
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<210> 5744
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 5744
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 20 25 30
 Cys Lys Gly Ala Arg Arg Pro Gly Cys Pro Thr Pro Glu Thr Gly Gln
 35 40 45
 Gly Gly Arg Pro Pro Lys Gly Pro Arg Thr Gly Arg Pro Ala Pro Ser
 50 55 60
 Pro Gly Ser Pro Pro Arg Glu Ser Arg Cys Leu Ala Pro Xaa Asp Pro
 65 70 75 80
 Leu Gly Trp Thr Pro Gly Pro Pro Ala Ala Pro Gly Ala Leu
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<210> 5745
 <211> 849

<212> DNA

<213> Homo sapiens

<400> 5745

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120
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180
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240
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300
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420
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660
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720
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<210> 5746

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5746

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Met Thr Ser Pro Pro Asp Leu Pro Arg Val Leu Val Ser Leu Ser
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Ala Gly Gly Pro Leu Cys Val Phe Val Gln Phe Cys Cys Met Gly Phe
20      25      30
Val Thr Gln Lys Leu Met Leu Arg Lys Ala Ser Leu Gly Pro Leu Pro
35      40      45
Arg Ala Ser Glu Arg Pro Gly Val Pro Val Phe Leu Glu Met Gly Pro
50      55      60
Ser Ala Ala Gly Cys Glu Ala Leu Arg Ser Ile Thr Gly Arg Ala Trp
65      70      75      80
Arg Trp Trp Pro Pro Gly Thr Thr Leu Ser Cys Leu Phe Thr Phe His
85      90      95
Tyr Gln Val Phe Ser Gly His Tyr Asp Leu Phe Pro Tyr Asn Ser Asp

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	100		105		110
Leu Cys Ile	Leu Leu Trp	Pro Ala Val	Ser Ala Gly	Gly Ser Gln	Arg
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Gly Thr Gly	Arg Ala Ser	Pro Cys Arg	Thr Ala Glu		
	130		135		140

<210> 5747
 <211> 1999
 <212> DNA
 <213> Homo sapiens

<400> 5747
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 120
 actcggggcg ccggggaccc ggcccggtag ctacgccccg gctggggcag cgcgagcgag
 180
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<210> 5748

<211> 492

<212> PRT

<213> Homo sapiens

<400> 5748

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Val	Gln	Ile	Arg	Val	Ala	Ile	Gln	Glu	Ala	Glu	Asp	Val	Asp	Glu	Leu
			20					25					30		
Glu	Asp	Glu	Glu	Glu	Gly	Ala	Glu	Thr	Arg	Gly	Ala	Gly	Asp	Pro	Ala
			35					40				45			
Arg	Tyr	Leu	Ser	Pro	Gly	Trp	Gly	Ser	Ala	Ser	Glu	Glu	Glu	Pro	Ser
			50				55				60				
Arg	Gly	His	Ser	Gly	Thr	Thr	Ala	Ser	Gly	Gly	Glu	Asn	Glu	Arg	Glu
					70					75				80	
Asp	Leu	Glu	Gln	Glu	Trp	Lys	Pro	Pro	Asp	Glu	Glu	Leu	Ile	Lys	Lys
			85						90					95	
Leu	Val	Asp	Gln	Ile	Glu	Phe	Tyr	Phe	Ser	Asp	Glu	Asn	Leu	Glu	Lys
			100					105					110		
Asp	Ala	Phe	Leu	Leu	Lys	His	Val	Arg	Arg	Asn	Lys	Leu	Gly	Tyr	Val
			115				120					125			
Ser	Val	Lys	Leu	Leu	Thr	Ser	Phe	Lys	Lys	Val	Lys	His	Leu	Thr	Arg
			130				135					140			
Asp	Trp	Arg	Thr	Thr	Ala	His	Ala	Leu	Lys	Tyr	Ser	Val	Val	Leu	Glu
					150					155				160	
Leu	Asn	Glu	Asp	His	Arg	Lys	Val	Arg	Arg	Thr	Thr	Pro	Val	Pro	Leu

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                165                170                175
Phe Pro Asn Glu Asn Leu Pro Ser Lys Met Leu Leu Val Tyr Asp Leu
                180                185                190
Tyr Leu Ser Pro Lys Leu Trp Ala Leu Ala Thr Pro Gln Lys Asn Gly
                195                200                205
Arg Val Gln Glu Lys Val Met Glu His Leu Leu Lys Leu Phe Gly Thr
                210                215                220
Phe Gly Val Ile Ser Ser Val Arg Ile Leu Lys Pro Gly Arg Glu Leu
225                230                235                240
Pro Pro Asp Ile Arg Arg Ile Ser Ser Arg Tyr Ser Gln Val Gly Thr
                245                250                255
Gln Glu Cys Ala Ile Val Glu Phe Glu Glu Val Glu Ala Ala Ile Lys
                260                265                270
Ala His Glu Phe Met Ile Thr Glu Ser Gln Gly Lys Glu Asn Met Lys
                275                280                285
Ala Val Leu Ile Gly Met Lys Pro Pro Lys Lys Lys Pro Ala Lys Asp
                290                295                300
Lys Asn His Asp Glu Glu Pro Thr Ala Ser Ile His Leu Asn Lys Ser
305                310                315                320
Leu Asn Lys Arg Val Glu Glu Leu Gln Tyr Met Gly Asp Glu Ser Ser
                325                330                335
Ala Asn Ser Ser Ser Asp Pro Glu Ser Asn Pro Thr Ser Pro Met Ala
                340                345                350
Gly Arg Arg His Ala Ala Thr Asn Lys Leu Ser Pro Ser Gly His Gln
                355                360                365
Asn Leu Phe Leu Ser Pro Asn Ala Ser Pro Cys Thr Ser Pro Trp Ser
370                375                380
Ser Pro Leu Ala Gln Arg Lys Gly Val Ser Arg Lys Ser Pro Leu Ala
385                390                395                400
Glu Glu Gly Arg Leu Asn Cys Ser Thr Ser Pro Glu Ile Phe Arg Lys
                405                410                415
Cys Met Asp Tyr Ser Ser Asp Ser Ser Val Thr Pro Ser Gly Ser Pro
                420                425                430
Trp Val Arg Arg Arg Arg Gln Ala Glu Met Gly Thr Gln Glu Lys Ser
                435                440                445
Pro Gly Thr Ser Pro Leu Leu Ser Arg Lys Met Gln Thr Ala Asp Gly
                450                455                460
Leu Pro Val Gly Val Leu Arg Leu Pro Arg Gly Pro Asp Asn Thr Arg
465                470                475                480
Gly Phe His Gly His Glu Arg Ser Arg Ala Cys Val
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<210> 5749

<211> 2849

<212> DNA

<213> Homo sapiens

<400> 5749

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120

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gaaataaaaac ccatttcaaa agttattgga aagaaagtaa ggtatggctc ttatgggtta
180

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<210> 5756

<211> 415

<212> PRT

<213> Homo sapiens

<400> 5756

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			20					25					30		
Ala	Ala	Leu	Leu	Ala	Gln	Asp	Tyr	Cys	Asp	Ala	Ile	Asp	Leu	Asn	Leu
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Gln	Asp	Glu	Trp	Asp	Leu	Leu	Gln	Arg	Met	Ile	Leu	Leu	Ala	His	Glu
					70					75				80	
Lys	Leu	Ser	Val	Pro	Val	Thr	Cys	Lys	Ile	Arg	Val	Phe	Pro	Glu	Ile
					85					90				95	
Asp	Lys	Thr	Val	Arg	Tyr	Ala	Gln	Met	Leu	Glu	Lys	Ala	Gly	Cys	Gln
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Leu	Leu	Thr	Val	His	Gly	Arg	Thr	Lys	Glu	Gln	Lys	Gly	Pro	Leu	Ser

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Arg Cys Leu Arg Asp Thr Gly Val Gln Gly Val Met Ser Ala Glu Gly
      165              170              175
Asn Leu His Asn Pro Ala Leu Phe Glu Gly Arg Ser Pro Ala Val Trp
      180              185              190
Glu Leu Ala Glu Glu Tyr Leu Asp Ile Val Arg Glu His Pro Cys Pro
      195              200              205
Leu Ser Tyr Val Arg Ala His Leu Phe Lys Leu Trp His His Thr Leu
      210              215              220
Gln Val His Gln Glu Leu Arg Glu Glu Leu Ala Lys Val Lys Thr Leu
225              230              235              240
Glu Gly Ile Ala Ala Val Ser Gln Glu Leu Lys Leu Arg Cys Gln Glu
      245              250              255
Glu Ile Ser Arg Gln Glu Gly Ala Lys Pro Thr Gly Asp Leu Pro Phe
      260              265              270
His Trp Ile Cys Gln Pro Tyr Ile Arg Pro Gly Pro Arg Glu Gly Ser
      275              280              285
Lys Glu Lys Ala Gly Ala Arg Ser Lys Arg Ala Leu Glu Glu Glu Glu
290              295              300
Gly Gly Thr Glu Val Leu Ser Lys Asn Lys Gln Lys Lys Gln Leu Arg
305              310              315              320
Asn Pro His Lys Thr Phe Asp Pro Ser Leu Lys Pro Lys Tyr Ala Lys
      325              330              335
Cys Asp Gln Cys Gly Asn Pro Lys Gly Asn Arg Cys Val Phe Ser Leu
      340              345              350
Cys Arg Gly Cys Cys Lys Lys Arg Ala Ser Lys Glu Thr Ala Asp Cys
      355              360              365
Pro Gly His Gly Leu Leu Phe Lys Thr Lys Leu Glu Lys Ser Leu Ala
      370              375              380
Trp Lys Glu Ala Gln Pro Glu Leu Gln Glu Pro Gln Pro Ala Ala Pro
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<210> 5757

<211> 2362

<212> DNA

<213> Homo sapiens

<400> 5757

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180
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300

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gagtcattca ctgccagcct gaagctgccc atgcgcata tctgggctgga gcctctgagg
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420
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<210> 5758

<211> 440

<212> PRT

<213> Homo sapiens

<400> 5758

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		20						25					30		
Asp	Gly	Ala	Leu	Glu	Asn	Ala	Gln	Asn	Leu	Gly	Tyr	Gln	Gly	Ala	Lys
		35					40					45			
Phe	Ala	Trp	Glu	Ser	Ala	Asp	Ser	Gly	Leu	Glu	Val	Cys	Pro	Glu	Asp
	50					55				60					
Ile	Tyr	Gly	Val	Gln	Glu	Val	His	Val	Asn	Gly	Ala	Val	Val	Leu	Ala
65				70					75					80	
Phe	Glu	Leu	Tyr	Tyr	His	Thr	Thr	Gln	Asp	Leu	Gln	Leu	Phe	Arg	Glu
			85					90						95	
Gly	Gly	Gly	Trp	Glu	Val	Val	Arg	Ala	Val	Ala	Lys	Phe	Trp	Cys	Ser
			100					105					110		
Arg	Val	Glu	Trp	Ser	Pro	Arg	Glu	Glu	Lys	Tyr	His	Leu	Arg	Gly	Val
		115					120					125			
Met	Ser	Pro	Asp	Glu	Tyr	His	Ser	Gly	Val	Asn	Asn	Ser	Val	Tyr	Thr
		130				135				140					
Asn	Val	Leu	Val	Gln	Asn	Ser	Leu	Arg	Phe	Ala	Ala	Ala	Leu	Ala	Gln
145				150					155					160	
Asp	Leu	Gly	Leu	Pro	Ile	Pro	Ser	Gln	Trp	Leu	Ala	Val	Ala	Asp	Lys
		165						170						175	
Ile	Lys	Val	Pro	Phe	Asp	Val	Glu	Gln	Asn	Phe	His	Pro	Glu	Phe	Asp
		180						185				190			
Gly	Tyr	Glu	Pro	Gly	Glu	Val	Val	Lys	Gln	Ala	Asp	Val	Val	Leu	Leu
	195					200						205			
Gly	Tyr	Pro	Val	Pro	Phe	Ser	Leu	Ser	Pro	Asp	Val	Arg	Arg	Lys	Asn
	210					215				220					
Leu	Glu	Ile	Tyr	Glu	Ala	Val	Thr	Ser	Pro	Gln	Gly	Pro	Ala	Met	Thr
225				230						235				240	
Trp	Ser	Met	Phe	Ala	Val	Gly	Trp	Met	Glu	Leu	Lys	Asp	Ala	Val	Arg

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Ala Arg Gly Leu	Leu Asp Arg Ser Phe	Ala Asn Met Ala Glu	Pro Phe		
	260	265	270		
Lys Val Trp Thr	Glu Asn Ala Asp Gly Ser Gly	Ala Val Asn Phe	Leu		
	275	280	285		
Thr Gly Met Gly	Gly Phe Leu Gln Ala Val Val	Phe Gly Cys Thr	Gly		
	290	295	300		
Phe Arg Val Thr	Arg Ala Gly Val Thr Phe	Asp Pro Val Cys	Leu Ser		
305	310	315	320		
Gly Ile Ser Arg	Val Ser Val Ser Gly Ile	Phe Tyr Gln Gly	Asn Lys		
	325	330	335		
Leu Asn Phe Ser	Phe Ser Glu Asp Ser Val Thr	Val Glu Val Thr	Ala		
	340	345	350		
Arg Ala Gly Pro	Trp Ala Pro His Leu Glu	Ala Glu Leu Trp	Pro Ser		
	355	360	365		
Gln Ser Arg Leu	Ser Leu Leu Pro Gly His	Lys Val Ser Phe	Pro Arg		
	370	375	380		
Ser Ala Gly Arg	Ile Gln Met Ser Pro Pro	Lys Leu Pro Gly	Ser Ser		
385	390	395	400		
Ser Ser Glu Phe	Pro Gly Arg Thr Phe Ser	Asp Val Arg Asp	Pro Leu		
	405	410	415		
Gln Ser Pro Leu	Trp Val Thr Leu Gly Ser	Ser Ser Pro Thr	Glu Ser		
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<210> 5759

<211> 1333

<212> DNA

<213> Homo sapiens

<400> 5759

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 120
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 180
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 240
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 660

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 720
 agaaatctac aaaggatcct tgagggttca ggtgctacag aattccactg ttctgctcgg
 780
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 840
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 900
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 960
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 1020
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 1080
 aagaatttga aacagagata cagtcacttc ctttgcttag tcttaccagt gattgtcatc
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<210> 5760

<211> 273

<212> PRT

<213> Homo sapiens

<400> 5760

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		20					25					30			
Asp	Ser	Val	Glu	Ser	Ala	Val	Asn	Ala	Glu	Arg	Gly	Gly	Ala	Asp	Arg
	35					40					45				
Ile	Glu	Leu	Cys	Ser	Gly	Leu	Ser	Glu	Gly	Gly	Thr	Thr	Pro	Ser	Met
	50					55				60					
Gly	Val	Leu	Gln	Val	Val	Lys	Gln	Ser	Val	Gln	Ile	Pro	Val	Phe	Val
65			70					75				80			
Met	Ile	Arg	Pro	Arg	Gly	Gly	Asp	Phe	Leu	Tyr	Ser	Asp	Arg	Glu	Ile
		85					90					95			
Glu	Val	Met	Lys	Ala	Asp	Ile	Arg	Leu	Ala	Lys	Leu	Tyr	Gly	Ala	Asp
		100					105					110			
Gly	Leu	Val	Phe	Gly	Ala	Leu	Thr	Glu	Asp	Gly	His	Ile	Asp	Lys	Glu
	115					120					125				
Leu	Cys	Met	Ser	Leu	Met	Ala	Ile	Cys	Arg	Pro	Leu	Pro	Val	Thr	Phe
	130					135				140					
His	Arg	Ala	Phe	Asp	Met	Val	His	Asp	Pro	Met	Ala	Ala	Leu	Glu	Thr
145			150					155					160		
Leu	Leu	Thr	Leu	Gly	Phe	Glu	Arg	Val	Leu	Thr	Ser	Gly	Cys	Asp	Ser
		165						170				175			
Ser	Ala	Leu	Glu	Gly	Leu	Pro	Leu	Ile	Lys	Arg	Leu	Ile	Glu	Gln	Ala

[illegible]

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<210> 5761
<211> 1452
<212> DNA
<213> Homo sapiens
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120
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180
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240
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660
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720
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780
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960
cctgtggggag ctttctgcaa gacatccaag atcgatatga aaggctgcac aaaagttttg
1020

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1140
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1200
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1260
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<210> 5762

<211> 333

<212> PRT

<213> Homo sapiens

<400> 5762

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			20					25					30		
Glu	Asn	Ala	Gln	Pro	Thr	Glu	Gly	Glu	Arg	Glu	Ile	Trp	Asn	Gln	Ile
		35					40					45			
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65					70				75					80	
Asp	Ile	Gln	Leu	Gln	Glu	Lys	Ala	Trp	Asn	Ala	Val	Cys	Pro	Leu	Val
			85					90						95	
Val	Arg	Leu	Lys	Arg	Phe	Tyr	Glu	Phe	Ser	Ile	Arg	Leu	Glu	Lys	Ala
			100					105						110	
Leu	Gln	Ser	Leu	Leu	Glu	Ser	Leu	Thr	Cys	Pro	Pro	Tyr	Thr	Pro	Thr
			115				120						125		
Gln	His	Leu	Glu	Arg	Glu	Gln	Ala	Leu	Ala	Lys	Glu	Phe	Ala	Glu	Ile
		130				135					140				
Leu	His	Phe	Thr	Leu	Arg	Phe	Asp	Glu	Leu	Lys	Met	Arg	Asn	Pro	Ala
145					150					155					160
Ile	Gln	Asn	Asp	Phe	Ser	Tyr	Tyr	Arg	Arg	Thr	Ile	Ser	Arg	Asn	Arg
				165				170						175	
Ile	Asn	Asn	Met	His	Leu	Asp	Ile	Glu	Asn	Glu	Val	Asn	Asn	Glu	Met
			180					185					190		
Ala	Asn	Arg	Met	Ser	Leu	Phe	Tyr	Ala	Glu	Ala	Thr	Pro	Met	Leu	Lys
			195				200						205		
Thr	Leu	Ser	Asn	Ala	Thr	Met	His	Phe	Val	Ser	Glu	Asn	Lys	Thr	Leu
			210				215						220		
Pro	Ile	Glu	Asn	Thr	Thr	Asp	Cys	Leu	Ser	Thr	Met	Thr	Ser	Val	Cys
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[illegible]

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<211> 3840
<212> DNA
<213> Homo sapiens
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480
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960
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1020
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1080

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1260
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<211> 466

<212> PRT

<213> Homo sapiens

<400> 5764

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		355					360					365								
Lys	Glu	Leu	Val	Leu	Ala	Gly	Lys	Asp	Ala	Ala	Ala	Glu	Tyr	Asp	Glu					
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Leu	Ala	Glu	Pro	Gln	Asp	Phe	Gln	Asp	Asp	Pro	Asp	Ile	Ile	Ala	Phe					
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<210> 5765

<211> 3220

<212> DNA

<213> Homo sapiens

<400> 5765

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<210> 5766

<211> 873

<212> PRT

<213> Homo sapiens

<400> 5766

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Val	Pro	Leu	Ala	Cys	Ala	Trp	Ser	Cys	Arg	Asn	Leu	Ile	Ala	Phe	Thr
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Glu	Gly	Trp	Ile	Ala	Val	Thr	Val	Ser	Gly	Leu	Val	Thr	Val	Ser	Leu
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	355	360	365		
Lys Val	Ala Ser Asp Thr Gln Phe Tyr	Pro Gly Leu Gly Leu Ala Leu			
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Ala Phe	His Asp Gly Ser Val His Ile Val His Arg Leu Ser Leu Gln				
385	390	395	400		
Thr Met	Ala Val Phe Tyr Ser Ser Ala Ala Pro Arg Pro Val Asp Glu				
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Pro Ala	Met Lys Arg Pro Arg Thr Ala Gly Pro Ala Val His Leu Lys				
	420	425	430		
Ala Met	Gln Leu Ser Trp Thr Ser Leu Ala Leu Val Gly Ile Asp Ser				
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His Gly	Lys Leu Ser Val Leu Arg Leu Ser Pro Ser Met Gly His Pro				
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Met Lys	Ala Ser Leu Cys Lys Leu Ser Pro Cys Thr Val Thr Arg Val				
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Gly Asp	Arg Leu Thr Glu Ile Cys Thr Lys Ile Thr Asp Val Asp Ile				
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Asp Lys	Val Met Ile Asn Leu Lys Thr Glu Glu Phe Val Leu Asp Met				
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Thr His	Cys Arg Arg Cys Ser Ser Cys Ser Gly Trp Ala Thr Ser				
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Cys Cys	Thr Cys Trp Pro Ala Tyr Pro Thr Ser Pro Ala Pro Pro Arg				
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Ser Pro	Ala Pro Pro Arg Ser Pro Pro Pro Pro Arg Ser Pro Pro Pro				
	645	650	655		
Pro Arg	Ser Pro Pro Leu His Glu Ala Ser Ala Gly Ser Leu Leu Arg				
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Pro Gly	His Ser Phe Leu Arg Asp Gly Thr Ser Leu Gly Met Leu Arg				
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Glu Leu	Met Val Val Ile Arg Ile Trp Gly Leu Leu Lys Pro Ser Cys				
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Leu Pro	Val Tyr Thr Ala Thr Ser Asp Thr Gln Asp Ser Met Ser Leu				
705	710	715	720		
Leu Phe	Arg Leu Leu Thr Lys Leu Trp Ile Cys Cys Arg Asp Glu Gly				
	725	730	735		
Pro Ala	Ser Glu Pro Asp Glu Ala Leu Val Asp Glu Cys Cys Leu Leu				
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Pro Ser	Gln Leu Leu Ile Pro Ser Leu Asp Trp Leu Pro Ala Ser Asp				
	755	760	765		
Gly Leu	Val Ser Arg Leu Gln Pro Lys Gln Pro Leu Arg Leu Gln Phe				

770 775 780
 Gly Arg Ala Pro Thr Leu Pro Gly Ser Ala Ala Thr Leu Gln Leu Asp
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 Leu His Leu Gly Ala Cys Pro Thr Glu Glu Cys Lys Ala Cys Thr Arg
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<210> 5767

<211> 1910

<212> DNA

<213> Homo sapiens

<400> 5767

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 1740
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 1800
 ttggaaggca caggtatgat actttctaac tcaggtgtaa aacctatggc agttgattct
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<210> 5768

<211> 360

<212> PRT

<213> Homo sapiens

<400> 5768

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			20					25					30		
Thr	Cys	Glu	Asn	Trp	Arg	Glu	Ile	His	His	Leu	Val	Phe	His	Val	Ala
		35					40					45			
Asn	Ile	Cys	Phe	Ala	Val	Gly	Leu	Val	Ile	Pro	Thr	Thr	Leu	His	Leu
	50					55				60					
His	Met	Ile	Phe	Leu	Arg	Gly	Met	Leu	Thr	Leu	Gly	Cys	Thr	Leu	Tyr
65				70				75						80	
Ile	Val	Trp	Ala	Thr	Leu	Tyr	Arg	Cys	Ala	Leu	Asp	Ile	Met	Ile	Trp
			85					90					95		
Asn	Ser	Val	Phe	Leu	Gly	Val	Asn	Ile	Leu	His	Leu	Ser	Tyr	Leu	Leu
		100					105						110		
Tyr	Lys	Lys	Arg	Pro	Val	Lys	Ile	Glu	Lys	Glu	Leu	Ser	Gly	Met	Tyr
	115					120					125				
Arg	Arg	Leu	Phe	Glu	Pro	Leu	Arg	Val	Pro	Pro	Asp	Leu	Phe	Arg	Arg

130 135 140
 Leu Thr Gly Gln Phe Cys Met Ile Gln Thr Leu Lys Lys Gly Gln Thr
 145 150 155 160
 Tyr Ala Ala Glu Asp Lys Thr Ser Val Asp Arg Leu Ser Ile Leu
 165 170 175
 Leu Lys Gly Lys Met Lys Val Ser Tyr Arg Gly His Phe Leu His Asn
 180 185 190
 Ile Tyr Pro Cys Ala Phe Ile Asp Ser Pro Glu Phe Arg Ser Thr Gln
 195 200 205
 Met His Lys Gly Glu Lys Phe Gln Val Thr Ile Ile Ala Asp Asp Asn
 210 215 220
 Cys Arg Phe Leu Cys Trp Ser Arg Glu Arg Leu Thr Tyr Phe Leu Glu
 225 230 235 240
 Ser Glu Pro Phe Leu Tyr Glu Ile Phe Arg Tyr Leu Ile Gly Lys Asp
 245 250 255
 Ile Thr Asn Lys Leu Tyr Ser Leu Asn Asp Pro Thr Leu Asn Asp Lys
 260 265 270
 Lys Ala Lys Lys Leu Glu His Gln Leu Ser Leu Cys Thr Gln Ile Ser
 275 280 285
 Met Leu Glu Met Arg Asn Ser Ile Ala Ser Ser Ser Asp Ser Asp Asp
 290 295 300
 Gly Leu His Gln Phe Leu Arg Ser Thr Ser Ser Met Ser Ser Leu His
 305 310 315 320
 Val Ser Ser Pro His Gln Arg Ala Ser Ala Lys Met Lys Pro Ile Glu
 325 330 335
 Glu Gly Ala Glu Asp Asp Asp Val Phe Glu Pro Ala Ser Pro Asn
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 Thr Leu Lys Val His Gln Leu Pro
 355 360

<210> 5769
 <211> 427
 <212> DNA
 <213> Homo sapiens

<400> 5769
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 427

<210> 5770

<211> 85
 <212> PRT
 <213> Homo sapiens

<400> 5770
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 Ile Lys Ile Phe Trp Gly Pro Glu Leu Lys Lys Glu Arg Ala Leu Arg
 35 40 45
 Lys Asp Glu Ala Ser Lys Ile Pro Ile Trp Lys Glu Gln Tyr Arg Val
 50 55 60
 Val Gln Glu Glu Asn Gln Val Ser Ser Thr Cys Val Tyr Leu Tyr Trp
 65 70 75 80
 Leu Asn Ser Cys Ile
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<210> 5771
 <211> 2539
 <212> DNA
 <213> Homo sapiens

<400> 5771
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 240
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 300
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 360
 catatacagt atcagtgcct tectggttat aagctccatg gaaattcatc aagaagggtgc
 420
 ctctccaatg gctcctggag tggcagctca ccttctgcgc tgccttgagc atgttcaca
 480
 ccagtaattg aatatggaac tgtcaatggg acagattttg actgtggaaa ggcagcccg
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 600
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 660
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 720
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 780
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 840
 aatgcagtgg caactggaga ggcacacacc tatgaaagtg aagtgaaact cagatgtctg
 900

gaagggtata cgatggatac agatacagat acaatcacct gtcagaaaga tggtcgctgg
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2539

<210> 5772

<211> 642

<212> PRT

<213> Homo sapiens

<400> 5772

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 20           25           30
Val Arg Cys Ala Thr Pro Pro Gln Leu Ala Asn Gly Val Thr Glu Gly
 35           40           45
Leu Asp Tyr Gly Phe Met Lys Glu Val Thr Phe His Cys His Gly Leu
 50           55           60
His Leu Ala Arg Cys Ser Lys Thr His Leu Ser Val Arg Gly Asn Trp
 65           70           75           80
Asp Ala Glu Ile Pro Leu Cys Lys Pro Val Asn Cys Gly Pro Pro Glu
 85           90           95
Asp Leu Ala His Gly Phe Pro Asn Gly Phe Ser Phe Ile His Gly Gly
100           105           110
His Ile Gln Tyr Gln Cys Phe Pro Gly Tyr Lys Leu His Gly Asn Ser
115           120           125
Ser Arg Arg Cys Leu Ser Asn Gly Ser Trp Ser Gly Ser Ser Pro Ser
130           135           140
Cys Leu Pro Cys Arg Cys Ser Thr Pro Val Ile Glu Tyr Gly Thr Val
145           150           155           160
Asn Gly Thr Asp Phe Asp Cys Gly Lys Ala Ala Arg Ile Gln Cys Phe
165           170           175
Lys Gly Phe Lys Leu Leu Gly Leu Ser Glu Ile Thr Cys Glu Ala Asp
180           185           190
Gly Gln Trp Ser Ser Gly Phe Pro His Cys Glu His Thr Ser Cys Gly
195           200           205
Ser Leu Pro Met Ile Pro Asn Ala Phe Ile Ser Glu Thr Ser Ser Trp
210           215           220
Lys Glu Asn Val Ile Thr Tyr Ser Cys Arg Ser Gly Tyr Val Ile Gln
225           230           235           240
Gly Ser Ser Asp Leu Ile Cys Thr Glu Lys Gly Val Trp Asn Gln Pro
245           250           255
Tyr Pro Val Cys Glu Pro Leu Ser Cys Gly Ser Pro Pro Ser Val Ala
260           265           270
Asn Ala Val Ala Thr Gly Glu Ala His Thr Tyr Glu Ser Glu Val Lys
275           280           285
Leu Arg Cys Leu Glu Gly Tyr Thr Met Asp Thr Asp Thr Asp Thr Ile
290           295           300
Thr Cys Gln Lys Asp Gly Arg Trp Phe Pro Glu Arg Ile Ser Cys Ser
305           310           315           320
Pro Lys Lys Cys Pro Leu Pro Glu Asn Ile Thr His Ile Leu Val His
325           330           335
Gly Asp Asp Phe Ser Val Asn Arg Gln Val Ser Val Ser Cys Ala Glu
340           345           350
Gly Tyr Thr Phe Glu Gly Val Asn Ile Ser Val Cys Gln Leu Asp Gly

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Thr Trp Glu Pro Pro Phe Ser Asp Glu Ser Cys Ser Pro Val Ser Cys
      370              375              380
Gly Lys Pro Glu Ser Pro Glu His Gly Phe Val Val Gly Ser Lys Tyr
385              390              395              400
Thr Phe Glu Ser Thr Ile Ile Tyr Gln Cys Glu Pro Gly Tyr Glu Leu
      405              410              415
Glu Gly Asn Arg Glu Arg Val Cys Gln Glu Asn Arg Gln Trp Ser Gly
      420              425              430
Gly Val Ala Ile Cys Lys Glu Thr Arg Cys Glu Thr Pro Leu Glu Phe
      435              440              445
Leu Asn Gly Lys Ala Asp Ile Glu Asn Arg Thr Thr Gly Pro Asn Val
      450              455              460
Val Tyr Ser Cys Asn Arg Gly Tyr Ser Leu Glu Gly Pro Ser Glu Ala
465              470              475              480
His Cys Thr Glu Asn Gly Thr Trp Ser His Pro Val Pro Leu Cys Lys
      485              490              495
Pro Asn Pro Cys Pro Val Pro Phe Val Ile Pro Glu Asn Ala Leu Leu
      500              505              510
Ser Glu Lys Glu Phe Tyr Val Asp Gln Asn Val Ser Ile Lys Cys Arg
      515              520              525
Glu Gly Phe Leu Leu Gln Gly His Gly Ile Ile Thr Cys Asn Pro Asp
      530              535              540
Glu Thr Trp Thr Gln Thr Ser Ala Lys Cys Glu Lys Ile Ser Cys Gly
545              550              555              560
Pro Pro Ala His Val Glu Asn Ala Ile Ala Arg Gly Val His Tyr Gln
      565              570              575
Tyr Gly Asp Met Ile Thr Tyr Ser Cys Tyr Ser Gly Tyr Met Leu Glu
      580              585              590
Gly Phe Leu Arg Ser Val Cys Leu Glu Asn Gly Thr Trp Thr Ser Pro
      595              600              605
Pro Ile Cys Arg Ala Val Cys Arg Phe Pro Cys Gln Asn Gly Gly His
      610              615              620
Leu Pro Thr Pro Lys Cys Leu Phe Leu Ser Arg Gly Leu Asp Gly Ala
625              630              635              640
Pro Leu

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<210> 5773

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5773

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120
agccgggtccc ggtcgcgatac ccgggacaag gagecgcgtgc ggaagcgttc caaatctcgg
180
gaaagtaaac ggaaccggcg gcgggagtcg cgggtccggt cgcgctccac caacacggcc
240
gtgtccccgc gcgagcggga ccgggagcgc cctcgtcccc gcccgaccgc atcgacatct
300

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tcgggcgcac ggtgagcaag cgcagcagcc tggacgagaa gcagaagcga gaggaggagg
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 420
 tcatcgagga agaaacagca cgaagagtag aagaattggt agcaanaaag ggtggaggaa
 480
 gaactggaga aaaggaagga tgaattgaa cgagaagttc tccgaagggt ggaggaagcc
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<210> 5774

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5774

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			20					25					30		
Ser	Ser	Lys	His	Asn	Lys	Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Arg
		35				40					45				
Asp	Lys	Glu	Arg	Val	Arg	Lys	Arg	Ser	Lys	Ser	Arg	Glu	Ser	Lys	Arg
	50					55				60					
Asn	Arg	Arg	Arg	Glu	Ser	Arg	Ser	Arg	Ser	Arg	Ser	Thr	Asn	Thr	Ala
65				70				75						80	
Val	Ser	Arg	Arg	Glu	Arg	Asp	Arg	Glu	Arg	Pro	Arg	Pro	Arg	Pro	Thr
			85					90						95	
Ala	Ser	Thr	Ser	Ser	Gly	Ala	Arg								
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<210> 5775

<211> 1441

<212> DNA

<213> Homo sapiens

<400> 5775

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 180
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 240
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 300
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 360
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 480

ctctgtgcagc aagcagcggc cgggcccagag ggtgcgcccg agcgggctgc cgagctggga
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 1440
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 1441

<210> 5776
 <211> 359
 <212> PRT
 <213> Homo sapiens

<400> 5776
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 35 40 45
 Ala Pro Asp Glu Gly Ala Gly Gly Ala Leu Arg Thr Ser Val Arg Ser
 50 55 60
 Leu Pro Arg Arg Ala Arg Cys Ser Ala Gly Phe Gly Pro Glu Ser Ser
 65 70 75 80
 Ala Glu Arg Pro Ala Gly Gln Pro Pro Gly Ala Val Pro Cys Ala Gln
 85 90 95
 Pro Arg Gly Ala Trp Arg Val Thr Leu Val Gln Gln Ala Ala Gly

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Pro Glu Gly Ala Pro Glu Arg Ala Ala Glu Leu Gly Val Asn Phe Gly
      115      120      125
Arg Ser Arg Gln Gly Ser Ala Arg Gly Thr Lys Pro His Arg Cys Glu
      130      135      140
Ala Cys Gly Lys Ser Phe Lys Tyr Asn Ser Leu Leu Lys His Gln
145      150      155      160
Arg Ile His Thr Gly Glu Lys Pro Tyr Ala Cys His Glu Cys Gly Lys
      165      170      175
Cys Phe Ala Ala Ala Ser Arg Phe Ile Gln His Gln Arg Ile His Ser
      180      185      190
Gly Glu Lys Pro Tyr Ala Cys Pro Glu Cys Ser Lys Thr Phe Thr Arg
      195      200      205
Ser Ser Asn Leu Ile Lys His Gln Val Ile His Ser Gly Glu Arg Pro
      210      215      220
Phe Ala Cys Gly Asp Cys Gly Lys Leu Phe Arg Arg Ser Phe Ala Leu
225      230      235      240
Leu Glu His Ala Arg Val His Ser Gly Glu Lys Pro Tyr Glu Cys Ser
      245      250      255
Asp Cys Gly Lys Cys Phe Arg Gly Arg Ser His Phe Phe Arg His Asn
      260      265      270
Arg Thr His Thr Gly Glu Lys Pro Tyr His Cys Leu Asp Cys Gly Lys
      275      280      285
Ser Phe Ser His Ser Ser His Leu Ile Lys His Gln Arg Thr His Arg
      290      295      300
Gly Val Arg Pro Tyr Ala Cys Pro Leu Cys Gly Lys Ser Phe Ser Arg
305      310      315      320
Arg Ser Asn Leu His Arg His Glu Lys Ile His Thr Thr Gly Pro Lys
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Thr Pro Pro Pro Ala Pro Thr
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<210> 5777
 <211> 1431
 <212> DNA
 <213> Homo sapiens

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 1320
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<210> 5778

<211> 164

<212> PRT

<213> Homo sapiens

<400> 5778

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 35 40 45
 Val Gly Asp His Gly Gln His Lys Ser Met Ala Glu Gly Ile Leu Ala
 50 55 60
 Glu Val Leu Arg Arg His Leu Gln His Glu Glu Ala Pro Gly Leu Arg
 65 70 75 80
 Arg Gly Arg Phe Ala Glu Arg Arg Gly Pro Lys Trp Ile Trp Arg Ser
 85 90 95
 Arg Pro Ala Gly Thr Pro Ala Leu Thr Val Ala Leu Arg Leu Pro Pro

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Gln Arg Arg Ala Gly Pro Pro Thr Tyr Val Pro Gly Cys Leu Arg Gln
      115      120      125
Ala Ala Arg Ser Pro Lys Leu Val Arg Ala Thr Trp Val Thr Ala Ala
      130      135      140
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<210> 5779

<211> 371

<212> DNA

<213> Homo sapiens

<400> 5779

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<210> 5780

<211> 123

<212> PRT

<213> Homo sapiens

<400> 5780

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      20      25      30
Pro Cys Val Cys Xaa Arg Val Cys Ala His Gly Asn Val Cys Gly Cys
      35      40      45
Val Cys Val His Ala Ala Val Cys Gly Cys Ala Xaa Val Cys Gly Cys
      50      55      60
Val Gly Val Cys Gly Cys Val His Gln Cys Arg Cys Ala Trp Val Cys
      65      70      75      80
Thr Gly Gly Cys Val Tyr Val Cys Gly Gly Val Pro Ile Cys Ala Gly
      85      90      95
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<210> 5781
 <211> 845
 <212> DNA
 <213> Homo sapiens

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<210> 5782
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 5782
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 Ala Pro Thr Leu Ala Asp Phe Lys Pro Pro Gly Glu Asp Gly Thr Ala
 35 40 45
 Thr Ser Ser Thr Glu Ala Pro Ala Ala Leu Ser Gly Thr Ser Gly Pro
 50 55 60
 Gly Xaa Ser Ser Pro Pro Gly Gly Pro Gly Leu Gly Pro Leu Pro Ala
 65 70 75 80
 Pro Glu Ala Leu Gln Pro Gly Val Gln Arg Gly Gly Pro Ala Gly His

	85		90		95
Gly Gln Ala	Pro Ala Pro Pro Ala Pro Gly Gln Ala Gly Ser His Arg				
	100		105		110
Pro Gly Ala	Ala Pro Ser Pro Arg Cys Ser Ser Gly Asn His Arg Ser				
	115		120		125
Ser Leu Ala	Val Ala Trp Arg His Gly Thr Trp Ile Gly Gln Pro Pro				
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Pro Cys Pro					
145					

<210> 5783

<211> 1839

<212> DNA

<213> Homo sapiens

<400> 5783

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1140

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 1740
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<210> 5784

<211> 386

<212> PRT

<213> Homo sapiens

<400> 5784

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			20				25					30			
Ile	Lys	Phe	Asp	Ala	Gly	Thr	Leu	Leu	Leu	Ser	Thr	His	Arg	Leu	Ile
		35					40					45			
Trp	Arg	Asp	Gln	Lys	Asn	His	Glu	Cys	Cys	Met	Ala	Ile	Leu	Leu	Ser
	50					55					60				
Gln	Ile	Val	Phe	Ile	Glu	Glu	Gln	Ala	Ala	Gly	Ile	Gly	Lys	Ser	Ala
65					70					75				80	
Lys	Ile	Val	Val	His	Leu	His	Pro	Ala	Pro	Pro	Asn	Lys	Glu	Pro	Gly
				85					90					95	
Pro	Phe	Gln	Ser	Ser	Lys	Asn	Ser	Tyr	Ile	Lys	Leu	Ser	Phe	Lys	Glu
		100						105					110		
His	Gly	Gln	Ile	Glu	Phe	Tyr	Arg	Arg	Leu	Ser	Glu	Glu	Met	Thr	Gln
		115					120					125			
Arg	Arg	Trp	Glu	Asn	Met	Pro	Val	Ser	Gln	Ser	Leu	Gln	Thr	Asn	Arg
	130					135					140				
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Glu	Leu	Ser	Lys	Ser	Ile	Ala	Asn	Lys	Ile	Lys	Asp	Lys	Gln	Gly	Asp
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Ile	Thr	Glu	Asp	Glu	Thr	Ile	Arg	Phe	Lys	Ser	Tyr	Leu	Leu	Ser	Met
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Gly	Ile	Ala	Asn	Pro	Val	Thr	Arg	Glu	Thr	Tyr	Gly	Ser	Gly	Thr	Gln
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Tyr	His	Met	Gln	Leu	Ala	Lys	Gln	Leu	Ala	Gly	Ile	Leu	Gln	Val	Pro
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Leu	Glu	Glu	Arg	Gly	Gly	Ile	Met	Ser	Leu	Thr	Glu	Val	Tyr	Cys	Leu
			260		265									270	
Val	Asn	Arg	Ala	Arg	Gly	Met	Glu	Leu	Leu	Ser	Pro	Glu	Asp	Leu	Val
	275		280		285										
Asn	Ala	Cys	Lys	Met	Leu	Glu	Ala	Leu	Lys	Leu	Pro	Leu	Arg	Leu	Arg
	290		295		300										
Val	Phe	Asp	Ser	Gly	Val	Met	Val	Ile	Glu	Leu	Gln	Ser	His	Lys	Glu
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Glu	Glu	Met	Val	Ala	Ser	Ala	Leu	Glu	Thr	Val	Ser	Glu	Lys	Gly	Ser
			325		330									335	
Leu	Thr	Ser	Glu	Glu	Phe	Ala	Lys	Leu	Val	Gly	Met	Ser	Val	Leu	Leu
			340		345									350	
Ala	Lys	Glu	Arg	Leu	Leu	Leu	Ala	Glu	Lys	Met	Gly	His	Leu	Cys	Arg
	355		360		365										
Asp	Asp	Ser	Val	Glu	Gly	Leu	Arg	Phe	Tyr	Pro	Asn	Leu	Phe	Met	Thr
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Gln	Ser														
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<210> 5785
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 <212> DNA
 <213> Homo sapiens

<400> 5785
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<400> 5790

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 35 40 45
 Pro Gln Pro Gly Ala Gly His Asp Glu Gly Pro Gly Ser Gly Trp Ala
 50 55 60
 Ala Lys Gly Thr Val Arg Gly Trp Asn Arg Arg Ala Arg Glu Ser Pro
 65 70 75 80
 Gly His Val Ser Glu Pro Asp Arg Thr Gln Leu Ser Gln Asp Leu Gly
 85 90 95
 Gly Gly Thr Leu Ala Met Asp Thr Leu Pro Asp Asn Arg Thr Arg Val
 100 105 110
 Val Glu Asp Asn His Ser Tyr Tyr Val Ser Arg Leu Tyr Gly Pro Ser
 115 120 125
 Glu Pro His Ser Arg Glu Leu Trp Val Asp Val Ala Glu Ala Asn Arg
 130 135 140
 Ser Gln Val Lys Ile His Thr Ile Leu Ser Asn Thr His Arg Gln Ala
 145 150 155 160
 Ser Arg Val Val Leu Ser Phe Asp Phe Pro Phe Tyr Gly His Pro Leu
 165 170 175
 Arg Gln Ile Thr Ile Ala Thr Gly Gly Phe Ile Phe Met Gly Asp Val
 180 185 190
 Ile His Arg Met Leu Thr Ala Thr Gln Tyr Val Ala Pro Leu Met Ala
 195 200 205
 Asn Phe Asn Pro Gly Tyr Ser Asp Asn Ser Thr Val Val Tyr Phe Asp
 210 215 220
 Asn Gly Thr Val Phe Val Val Gln Trp Asp His Val Tyr Leu Gln Gly
 225 230 235 240
 Trp Glu Asp Lys Gly Ser Phe Thr Phe Gln Ala Ala Leu His His Asp
 245 250 255
 Gly Arg Ile Val Phe Ala Tyr Lys Glu Ile Pro Met Ser Val Pro Glu
 260 265 270
 Ile Ser Ser Ser Gln His Pro Val Lys Thr Gly Leu Ser Asp Ala Phe
 275 280 285
 Met Ile Leu Asn Pro Ser Pro Asp Val Pro Glu Ser Arg Arg Arg Ser
 290 295 300
 Ile Phe Glu Tyr His Arg Ile Glu Leu Asp Pro Ser Lys Val Thr Ser
 305 310 315 320
 Met Ser Ala Val Glu Phe Thr Pro Leu Pro Thr Cys Leu Gln His Arg
 325 330 335
 Ser Cys Asp Ala Cys Met Ser Ser Asp Leu Thr Phe Asn Cys Ser Trp
 340 345 350
 Cys His Val Leu Gln Arg Cys Ser Ser Gly Phe Asp Arg Tyr Arg Gln
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<210> 5791

<211> 3285

<212> DNA

<213> Homo sapiens

<400> 5791

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<210> 5792

<211> 479

<212> PRT

<213> Homo sapiens

<400> 5792

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			20					25					30		
Gly	Ser	Phe	Ile	Gly	Tyr	Lys	Glu	Lys	Pro	Gln	Asp	Val	Asp	Leu	Pro
		35					40					45			
Tyr	Pro	Leu	Asn	Asn	Phe	Ser	Val	Ala	Lys	Cys	Gln	Leu	Met	Lys	Thr
	50					55					60				
Glu	Arg	Pro	Lys	Pro	Asn	Thr	Phe	Ile	Ile	Arg	Cys	Leu	Gln	Trp	Thr
65					70				75					80	
Thr	Val	Ile	Glu	Arg	Thr	Phe	His	Val	Asp	Thr	Pro	Glu	Glu	Arg	Glu
			85						90					95	
Glu	Trp	Thr	Glu	Ala	Ile	Gln	Ala	Val	Ala	Asp	Arg	Leu	Gln	Arg	Gln
			100					105					110		
Glu	Glu	Glu	Arg	Met	Asn	Cys	Ser	Pro	Thr	Ser	Gln	Ile	Asp	Asn	Ile
		115					120					125			
Gly	Glu	Glu	Glu	Met	Asp	Ala	Ser	Thr	Thr	His	His	Lys	Arg	Lys	Thr
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Met	Asn	Asp	Phe	Asp	Tyr	Leu	Lys	Leu	Leu	Gly	Lys	Gly	Thr	Phe	Gly
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Lys	Val	Ile	Leu	Val	Arg	Glu	Lys	Ala	Ser	Gly	Lys	Tyr	Tyr	Ala	Met
			165						170					175	
Lys	Ile	Leu	Lys	Lys	Glu	Val	Ile	Ile	Ala	Lys	Asp	Glu	Val	Ala	His
			180					185					190		
Thr	Leu	Thr	Glu	Ser	Arg	Val	Leu	Lys	Asn	Thr	Arg	His	Pro	Phe	Leu
	195						200					205			
Thr	Ser	Leu	Lys	Tyr	Ser	Phe	Gln	Thr	Lys	Asp	Arg	Leu	Cys	Phe	Val
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Met	Glu	Tyr	Val	Asn	Gly	Gly	Glu	Leu	Phe	Phe	His	Leu	Ser	Arg	Glu
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Arg	Val	Phe	Ser	Glu	Asp	Arg	Thr	Arg	Phe	Tyr	Gly	Ala	Glu	Ile	Val
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Ser	Ala	Leu	Asp	Tyr	Leu	His	Ser	Gly	Lys	Ile	Val	Tyr	Arg	Asp	Leu
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Lys	Leu	Glu	Asn	Leu	Met	Leu	Asp	Lys	Asp	Gly	His	Ile	Lys	Ile	Thr
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Asp	Phe	Gly	Leu	Cys	Lys	Glu	Gly	Ile	Thr	Asp	Ala	Ala	Thr	Met	Lys
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<400> 5793

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<400> 5795

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<400> 5796

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<210> 5799

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<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Val	Leu	Ala	Met	Ile	His	Val	Lys	Arg	Cys	Thr	Pro	Ile	Pro	Ala	Leu				
		355					360					365							
Leu	Phe	Thr	Cys	Ile	Ser	Thr	Leu	Leu	Met	Leu	Val	Thr	Ser	Asp	Met				
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450		455		460
Leu Gly Val Tyr Trp Gln His Lys Pro Lys Cys Phe Ser Asp Phe Ile				
465		470		475
Glu Leu Leu Thr Leu Val Ser Gln Lys Met Cys Val Val Val Tyr Pro				
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Glu Val Glu Arg Gly Ser Gly Thr Glu Glu Ala Asn Glu Asp Met Glu				
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<210> 5801

<211> 2418

<212> DNA

<213> Homo sapiens

<400> 5801

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<211> 350

<212> PRT

<213> Homo sapiens

<400> 5802

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Pro Arg Glu Asn Pro Asp Leu Ala Cys Leu Gln Ser Ile Ile Phe Asp
      50           55           60
Glu Glu Arg Ser Pro Glu Glu Gln Ala Lys Thr Tyr Lys Asp Glu Gly
      65           70           75           80
Asn Asp Tyr Phe Lys Glu Lys Asp Tyr Lys Lys Ala Val Ile Ser Tyr
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Thr Glu Gly Leu Lys Lys Lys Cys Ala Asp Pro Asp Leu Asn Ala Val
      100          105          110
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      115          120          125
Ser Ala Leu Asn Asp Val Thr Ala Ala Arg Lys Leu Lys Pro Cys His
      130          135          140
Leu Lys Ala Ile Ile Arg Gly Ala Leu Cys His Leu Glu Leu Lys His
      145          150          155          160
Phe Ala Glu Ala Val Asn Trp Cys Asp Glu Gly Leu Gln Ile Asp Ala
      165          170          175
Lys Glu Lys Lys Leu Leu Glu Met Arg Ala Lys Ala Asp Lys Leu Lys
      180          185          190
Arg Ile Glu Gln Arg Asp Val Arg Lys Ala Asn Leu Lys Glu Lys Lys
      195          200          205
Glu Arg Asn Gln Asn Glu Ala Leu Leu Gln Ala Ile Lys Ala Arg Asn
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Ile Arg Leu Ser Glu Ala Ala Cys Glu Asp Glu Asp Ser Ala Ser Glu
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Gly Ala Arg Leu Ser Leu Asp Gly Gln Gly Arg Leu Ser Trp Pro Val
      260          265          270
Leu Phe Leu Tyr Pro Glu Tyr Ala Gln Ser Asp Phe Ile Ser Ala Phe
      275          280          285
His Glu Asp Ser Arg Phe Ile Asp His Leu Met Val Met Phe Gly Glu
      290          295          300
Thr Pro Ser Trp Asp Leu Glu Gln Lys Tyr Cys Leu Ile Ile Trp Arg
      305          310          315          320
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<210> 5803

<211> 692

<212> DNA

<213> Homo sapiens

<400> 5803

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120

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<210> 5804

<211> 126

<212> PRT

<213> Homo sapiens

<400> 5804

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			20						25				30		
Gln	Thr	Val	Lys	Glu	Phe	Ile	Val	Phe	Leu	Lys	Gln	Asp	Val	Pro	Leu
			35				40					45			
Arg	Thr	Asn	Leu	Pro	Pro	Pro	Phe	Arg	Asn	Tyr	Lys	Tyr	Asp	Ala	Leu
			50				55				60				
Lys	Ile	Ile	His	Gln	Ala	His	Lys	Ser	Lys	Thr	Asn	Glu	Leu	Val	Leu
65				70					75				80		
Ser	Leu	Glu	Asp	Asp	Glu	Arg	Leu	Leu	Leu	Lys	Glu	Asp	Ser	Thr	Leu
			85						90				95		
Lys	Ala	Ala	Gly	Ile	Ala	Ser	Glu	Thr	Glu	Ile	Ala	Phe	Phe	Cys	Glu
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Glu	Asp	Tyr	Arg	Asn	Tyr	Lys	Ala	Asn	Pro	Ile	Ser	Ser	Trp		
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<210> 5805

<211> 1112

<212> DNA

<213> Homo sapiens

<400> 5805

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<211> 105

<212> PRT

<213> Homo sapiens

<400> 5806

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			20					25					30		
Leu	Ser	Pro	Arg	Lys	Asp	Gly	Leu	Ser	Tyr	Gln	Ile	Phe	Pro	Asp	Pro
		35				40					45				
Ser	Asp	Phe	Asp	Arg	Cys	Cys	Lys	Leu	Lys	Asp	Arg	Leu	Pro	Ser	Ile
	50				55					60					
Val	Val	Glu	Pro	Thr	Glu	Gly	Glu	Val	Glu	Ser	Gly	Glu	Leu	Arg	Trp
65				70				75					80		
Pro	Pro	Glu	Glu	Phe	Leu	Val	Gln	Glu	Asp	Glu	Gln	Asp	Asn	Cys	Glu
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100

105

<210> 5807

<211> 1429

<212> DNA

<213> Homo sapiens

<400> 5807

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<210> 5808

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5808

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35 40 45
Trp Leu Ala Ala Leu Gln Asp Arg Ser Ile Leu Ala Pro Leu Ala Trp
50 55 60
Asp Leu Gly Leu Leu Leu Leu Phe Val Gly Gln His Ser Leu Met Ala
65 70 75 80
Ala Glu Arg Val Lys Ala Trp Thr Ser Arg Tyr Phe Gly Val Leu Gln
85 90 95
Arg Ser Leu Tyr Val Ala Cys Thr Ala Leu Ala Leu Gln Leu Val Met
100 105 110
Arg Tyr Trp Glu Pro Ile Pro Lys Gly Pro Val Leu Trp Glu Ala Arg
115 120 125
Ala Glu Pro Trp Ala Thr Trp Val Pro Leu Leu Cys Phe Val Leu His
130 135 140
Val Ile Ser Trp Leu Leu Ile Phe Ser Ile Leu Leu Val Phe Asp Tyr
145 150 155 160
Ala Glu Leu Met Gly Leu Lys Gln Val Tyr Tyr His Val Leu Gly Leu
165 170 175
Gly Glu Pro Leu Ala Leu Lys Ser Pro Arg Ala Leu Arg Leu Phe Ser
180 185 190
His Leu Arg His Pro Val Cys Val Glu Leu Leu Thr Val Leu Trp Val
195 200 205
Val Pro Thr Leu Gly Thr Asp Arg Leu Leu Leu Ala Phe Leu Leu Thr
210 215 220
Leu Tyr Leu Gly Leu Ala His Gly Leu Asp Gln Gln Asp Leu Arg Tyr
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<210> 5809

<211> 2009

<212> DNA

<213> Homo sapiens

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<211> 52

<212> PRT

<213> Homo sapiens

<400> 5810

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		20					25				30			
Phe	Lys	Gln	Phe	Ser	Cys	Leu	Ser	Leu	Leu	Ser	Ser	Trp	His	Tyr
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His	Pro	Thr	Pro											
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<210> 5811

<211> 1607

<212> DNA

<213> Homo sapiens

<400> 5811

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<210> 5812

<211> 463

<212> PRT

<213> Homo sapiens

<400> 5812

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Glu	Arg	Ser	His	Ala	Val	Ile	Arg	Ser	Leu	Glu	Ala	Ala	Asp	Leu	Pro
			20					25					30		
Thr	Pro	Gln	Ala	Ile	Glu	Pro	Gln	Ala	Ile	Val	Gln	Gln	Val	Pro	Ala
		35					40					45			
Pro	Ser	Arg	Met	Gln	Met	Pro	Gln	Gly	Asn	Pro	Leu	Leu	Leu	Ser	His
	50				55					60					
Thr	Leu	Gln	Glu	Leu	Leu	Ala	Arg	Asp	Thr	Val	Gln	Val	Glu	Leu	Ile
65				70					75				80		
Pro	Glu	Lys	Lys	Gly	Leu	Phe	Leu	Lys	His	Val	Glu	Tyr	Glu	Val	Ser
			85					90					95		
Ser	Gln	Arg	Phe	Lys	Ser	Ser	Val	Tyr	Arg	Arg	Tyr	Asn	Asp	Phe	Val
			100					105				110			
Val	Phe	Gln	Glu	Met	Leu	Leu	His	Lys	Phe	Pro	Tyr	Arg	Met	Val	Pro

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      115              120              125
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      130              135              140
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      145              150              155              160
Pro Leu Phe Ser Glu Asp Val Val Leu Lys Leu Phe Leu Ser Phe Ser
      165              170              175
Gly Ser Asp Val Gln Asn Lys Leu Lys Glu Ser Ala Gln Cys Val Gly
      180              185              190
Asp Glu Phe Leu Asn Cys Lys Leu Ala Thr Arg Ala Lys Asp Phe Leu
      195              200              205
Pro Ala Asp Ile Gln Ala Gln Phe Ala Ile Ser Arg Glu Leu Ile Arg
      210              215              220
Asn Ile Tyr Asn Ser Phe His Lys Leu Arg Asp Arg Ala Glu Arg Ile
      225              230              235              240
Ala Ser Arg Ala Ile Asp Asn Ala Ala Asp Leu Leu Ile Phe Gly Lys
      245              250              255
Glu Leu Ser Ala Ile Gly Ser Asp Thr Thr Pro Leu Pro Ser Trp Ala
      260              265              270
Ala Leu Asn Ser Ser Thr Trp Gly Ser Leu Lys Gln Ala Leu Lys Gly
      275              280              285
Leu Ser Val Glu Phe Ala Leu Leu Ala Asp Lys Ala Ala Gln Gln Gly
      290              295              300
Lys Gln Glu Glu Asn Asp Val Val Glu Lys Leu Asn Leu Phe Leu Asp
      305              310              315              320
Leu Leu Gln Ser Tyr Lys Asp Leu Cys Glu Arg His Glu Lys Gly Val
      325              330              335
Leu His Lys His Gln Arg Ala Leu His Lys Tyr Ser Leu Met Lys Arg
      340              345              350
Gln Met Met Ser Ala Thr Ala Gln Asn Arg Glu Pro Glu Ser Val Glu
      355              360              365
Gln Leu Glu Ser Arg Ile Val Glu Gln Glu Asn Ala Ile Gln Thr Met
      370              375              380
Glu Leu Arg Asn Tyr Phe Ser Leu Tyr Cys Leu His Gln Glu Thr Gln
      385              390              395              400
Leu Ile His Val Tyr Leu Pro Leu Thr Ser His Ile Leu Arg Ala Phe
      405              410              415
Val Asn Ser Gln Ile Gln Gly His Lys Glu Met Ser Lys Val Trp Asn
      420              425              430
Asp Leu Arg Pro Lys Leu Ser Cys Leu Phe Ala Gly Pro His Ser Thr
      435              440              445
Leu Thr Pro Pro Cys Ser Pro Pro Glu Asp Gly Leu Cys Pro His
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<210> 5813

<211> 2991

<212> DNA

<213> Homo sapiens

<400> 5813

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120

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300
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1680
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1740

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<210> 5814

<211> 149

<212> PRT

<213> Homo sapiens

<400> 5814

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Tyr	His	Pro	Asp	Lys	His	Arg	Asp	Pro	Glu	Leu	Lys	Ser	Gln	Ala	Glu
			20					25					30		
Arg	Leu	Phe	Asn	Leu	Val	His	Gln	Ala	Tyr	Glu	Val	Leu	Ser	Asp	Pro

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      35          40          45
Gln Thr Arg Ala Ile Tyr Asp Ile Tyr Gly Lys Arg Gly Leu Glu Met
      50          55          60
Glu Gly Trp Glu Val Val Glu Arg Arg Arg Thr Pro Ala Glu Ile Arg
65          70          75          80
Glu Glu Phe Glu Arg Leu Gln Arg Glu Arg Glu Glu Arg Arg Leu Gln
      85          90          95
Gln Arg Thr Asn Pro Lys Leu Cys Asp Asn Lys Leu Cys Ser Ala Val
      100          105          110
Phe Ile Pro Trp Asn Pro Thr Arg Pro Asp His Cys Pro Ser Ser Glu
      115          120          125
Pro Arg Gln Glu His Arg Gly Leu Pro Ala Val Ala Met Gly Tyr Pro
      130          135          140
Val Ser His Glu His
145

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<210> 5815

<211> 590

<212> DNA

<213> Homo sapiens

<400> 5815

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120
ctgctgctgg gtcaaacaga tgataccaga taccatgtgc tagtgaacct gggcctcccg
180
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240
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300
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420
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480
cagactacgg gcggttacat ccgccatggc cgcggctgct cggaggcttc agaccaccac
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590

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<210> 5816

<211> 196

<212> PRT

<213> Homo sapiens

<400> 5816

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Phe Ile Gln Ala Ala Leu Gly Asp Gln Pro Arg Asp Ile Leu Cys Gly
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Ala Ala Asp Glu Val Leu Ala Val Leu Lys Asn Glu Lys Leu Arg Asp
      20          25          30
Lys Glu Arg Arg Lys Glu Ile Asp Leu Leu Leu Gly Gln Thr Asp Asp

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```

      35          40          45
Thr Arg Tyr His Val Leu Val Asn Leu Gly Leu Pro Ser Leu Phe Ser
      50          55          60
Phe Gly Leu Val Asp Asp Ala His His Leu Ile Asn Ala Leu Arg Gln
65          70          75          80
Gln Ser Ile Thr Leu His Leu Val Asp Val Met Pro Val Leu Ile Thr
      85          90          95
Leu Ser Ser Leu Gly Ser Ser Phe Leu Leu His Leu Arg Phe Gly Pro
      100          105          110
Leu Ser Leu Val Ser His Thr Gly Ala Leu Gln Leu Pro Asn Lys Gly
      115          120          125
Gln His Leu Ser Cys Gly Phe Ile Pro Ala Gly Pro Val Asn Glu Arg
      130          135          140
Thr Val Ser Leu Glu His Lys Ile Arg Val Arg Leu Val Leu Val Leu
145          150          155          160
Gln Thr Thr Gly Gly Tyr Ile Arg His Gly Arg Gly Cys Ser Glu Ala
      165          170          175
Ser Asp His His Ala Ser Ile Pro Gln Ala Ala Asn Gly Arg Arg Ser
      180          185          190
Leu Leu Leu Ala
      195

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<210> 5817

<211> 648

<212> DNA

<213> Homo sapiens

<400> 5817

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120
cctagtaggc agtgctcctg ggacaagtct gagtcacccc agagaagcag catgaacaat
180
ggatccccc cagctctatc aggcagcaaa accaacagcc caaagaacag tgttcacaag
240
ctagatgtgt ctagaagccc ccctctcatg gtcaaaaaga acccagcctt taataagggt
300
agtgggatag ttaccaatgg gtccttcagc agcagtaatg cagaagggtc tgagaaaacc
360
caaaccaccc ccaatgggag cctacaggcc agaaggagct cttcactgaa ggtatctggt
420
accaaaatgg gcacgcacag tgtacagaat ggaacgggtg gcattgggcat tttgaacagc
480
gacacactcg ggaacccac aaatgttcga aacatgagct ggctgccaaa tggctatgtg
540
accctgaggg ataacaagca gaaagaacaa gctggagagt taggccagca caacagactg
600
tcacctatga taatgtccat cacagttctc catgatgaac ttgatgac
648

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<210> 5818

<211> 191

<212> PRT

<213> Homo sapiens

<400> 5818

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Met Gly Gln Leu Gln Asn Lys Glu Asn Asn Asn Thr Lys Asp Ser Pro
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Ser Arg Gln Cys Ser Trp Asp Lys Ser Glu Ser Pro Gln Arg Ser Ser
      20           25           30
Met Asn Asn Gly Ser Pro Thr Ala Leu Ser Gly Ser Lys Thr Asn Ser
      35           40           45
Pro Lys Asn Ser Val His Lys Leu Asp Val Ser Arg Ser Pro Pro Leu
      50           55           60
Met Val Lys Lys Asn Pro Ala Phe Asn Lys Gly Ser Gly Ile Val Thr
65           70           75           80
Asn Gly Ser Phe Ser Ser Ser Asn Ala Glu Gly Leu Glu Lys Thr Gln
      85           90           95
Thr Thr Pro Asn Gly Ser Leu Gln Ala Arg Arg Ser Ser Ser Leu Lys
      100          105          110
Val Ser Gly Thr Lys Met Gly Thr His Ser Val Gln Asn Gly Thr Val
      115          120          125
Arg Met Gly Ile Leu Asn Ser Asp Thr Leu Gly Asn Pro Thr Asn Val
      130          135          140
Arg Asn Met Ser Trp Leu Pro Asn Gly Tyr Val Thr Leu Arg Asp Asn
145          150          155          160
Lys Gln Lys Glu Gln Ala Gly Glu Leu Gly Gln His Asn Arg Leu Ser
      165          170          175
Pro Met Ile Met Ser Ile Thr Val Leu His Asp Glu Leu Asp Asp
      180          185          190

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<210> 5819

<211> 1652

<212> DNA

<213> Homo sapiens

<400> 5819

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120
cgctctgect tgcagctett ctggaccgag gagcccaaag ccctaccctc accattcacc
180
aggctoctgtg ggaagagcag cgtggagggtg ggctgagggtt agaagggtgca gagcgtggaa
240
gaagattgtg agctgagtat tggacatctg ttcttgaata gtccctgggc ctgccatagg
300
aaaggaagtt ctccagggtt acagttctta tccgcgtgaa tacacatggc tctgttacga
360
aaaattaatc aggtgctgct gtctctctctg atcgtgaccc tctgtgtgat tctgtataag
420
aaagttcata aggggactgt gcccaagaat gacgcagatg atgaatccga gactcctgaa
480
gaactggaag aagagattcc tgtggtgatt tgtgctgcag cagggaggat ggggtgcact
540
atggctgcca tcaatagcat ctacagcaac cctgacgcca acatcttggt ctatgtagtg
600

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ggactccgga atactctgac tcgaatacga aaatggattg aacattccaa actgagagaa
 660
 ataaacttta aaatcgtgga attcaaccgg atggctctca aagggaagat cagaccagac
 720
 tcatcgaggc ctgaattgct ccagcctctg aactttgttc gattttatct ccctctactt
 780
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 840
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 900
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 960
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 1652

<210> 5820

<211> 274

<212> PRT

<213> Homo sapiens

<400> 5820

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Val	Thr	Leu	Cys	Val	Ile	Leu	Tyr	Lys	Lys	Val	His	Lys	Gly	Thr	Val
			20					25					30		
Pro	Lys	Asn	Asp	Ala	Asp	Asp	Glu	Ser	Glu	Thr	Pro	Glu	Glu	Leu	Glu
			35				40					45			
Glu	Glu	Ile	Pro	Val	Val	Ile	Cys	Ala	Ala	Ala	Gly	Arg	Met	Gly	Ala
		50				55					60				
Thr	Met	Ala	Ala	Ile	Asn	Ser	Ile	Tyr	Ser	Asn	Pro	Asp	Ala	Asn	Ile
65					70				75					80	
Leu	Phe	Tyr	Val	Val	Gly	Leu	Arg	Asn	Thr	Leu	Thr	Arg	Ile	Arg	Lys

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<210> 5821
<211> 3292
<212> DNA
<213> Homo sapiens
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<400> 5821
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taaaaaggaa aaaatataac ttagagcccc ctatgaaaaa ctaaattagc atcatgacag
180
gatacacttt ggggagtgaa atttcacagt acctttattt aattccaagc catagagcct
240
ggtaatatatt ttctctttat cagctgtggc actaaaataa cagtggattt tttccctcta
300
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360
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420
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480
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600
gaagaccctc ggagccaggg cgtggaaaga ttcatacagg agtcaaaatt aaaaataaac
660

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720
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780
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1680
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<211> 712

<212> PRT

<213> Homo sapiens

<400> 5822

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			20					25					30		
His	Lys	Glu	Arg	Cys	Ile	Ala	Ala	Ser	Leu	Glu	Leu	Asn	Asn	Pro	Val
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Pro	Glu	Gln	Pro	Pro	Leu	Pro	Thr	Ser	Glu	Ser	Pro	Phe	Ala	Trp	Ser
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Pro	Leu	Ala	Gly	Glu	Lys	Phe	Val	Glu	Val	Tyr	Lys	Glu	Ala	His	Leu
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Leu	Ala	Leu	His	Ile	Glu	Ser	Ser	Ser	Arg	Asn	Gln	Ala	Ala	Gln	Ala
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Ala	Lys	Pro	Glu	Asp	Pro	Arg	Ser	Gln	Gly	Val	Glu	Arg	Phe	Ile	Gln

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Glu Ser Lys Leu Lys Ile Asn Leu Phe Glu Lys Glu Lys Glu Met Lys					
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Lys Ser Pro Thr Ser Leu Lys Arg Glu Thr Tyr Tyr Leu Ser Asp Ser					
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Pro Leu Leu Gly Pro Pro Val Gly Glu Pro Arg Leu Leu Ala Ser Ser					
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Pro Ala Leu Pro Ser Ser Gly Ala Gln Ala Arg Leu Thr Arg Ala Pro					
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Gly Pro Pro His Ser Ala His Ala Leu Pro Arg Glu Ser Cys Thr Ala					
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His Ala Ala Ser Gln Ala Ala Thr Gln Arg Lys Pro Gly Thr Lys Leu					
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Leu Leu Pro Arg Ala Ala Ser Val Arg Gly Arg Ser Ile Pro Gly Ala					
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Ala Glu Lys Pro Lys Lys Glu Ile Pro Ala Ser Pro Ser Arg Thr Lys					
225		230		235	240
Ile Pro Ala Glu Lys Glu Ser His Arg Asp Val Leu Pro Asp Lys Pro					
	245		250		255
Ala Pro Gly Ala Val Asn Val Pro Ala Ala Gly Ser His Leu Gly Gln					
	260		265		270
Gly Lys Arg Ala Ile Pro Val Pro Asn Lys Leu Gly Leu Lys Lys Thr					
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Val Gly Lys Ala Lys Ser Ser Glu Phe Ala Ser Ile Pro Ala Asn Ser					
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Ser Arg Pro Leu Ser Asn Ile Ser Lys Ser Gly Arg Met Gly Pro Ala					
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Gln Ala Lys Arg Val Asp Val Ser Glu Leu Ala Ala Glu Gln Leu Thr					
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	405		410		415
Asn Lys Thr Arg Ser Ile Arg Arg Arg Asp Ser Cys Leu Asn Ser Lys					
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Thr Lys Val Met Pro Thr Pro Thr Asn Gln Phe Lys Ile Pro Lys Phe					
	435		440		445
Ser Ile Gly Asp Ser Pro Asp Ser Ser Thr Pro Lys Leu Ser Arg Ala					
	450		455		460
Gln Arg Pro Gln Ser Cys Thr Ser Val Gly Arg Val Thr Val His Ser					
465		470		475	480
Thr Pro Val Arg Arg Ser Ser Gly Pro Ala Pro Gln Ser Leu Leu Ser					
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Ala Trp Arg Val Ser Ala Leu Pro Thr Pro Ala Ser Arg Arg Cys Ser					
	500		505		510
Gly Leu Pro Pro Met Thr Pro Lys Thr Met Pro Arg Ala Val Gly Ser					
	515		520		525
Pro Leu Cys Val Pro Ala Arg Arg Ser Ser Glu Pro Arg Lys Asn					

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 Val Pro Gln Ala Leu Asn Phe Ser Pro Glu Glu Ser Asp Ser Thr Phe
 580 585 590
 Ser Lys Ser Thr Ala Thr Glu Val Ala Arg Glu Glu Ala Lys Pro Gly
 595 600 605
 Gly Asp Ala Ala Pro Ser Glu Ala Leu Leu Val Asp Ile Lys Leu Glu
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 Pro Leu Ala Val Thr Pro Asp Ala Ala Ser Gln Pro Leu Ile Asp Leu
 625 630 635 640
 Pro Leu Ile Asp Phe Cys Asp Thr Pro Glu Ala His Val Ala Val Gly
 645 650 655
 Ser Glu Ser Arg Pro Leu Ile Asp Leu Met Thr Asn Thr Pro Asp Met
 660 665 670
 Asn Lys Asn Val Ala Lys Pro Ser Pro Val Val Gly Gln Leu Ile Asp
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<210> 5823

<211> 2585

<212> DNA

<213> Homo sapiens

<400> 5823

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<210> 5824

<211> 213

<212> PRT

<213> Homo sapiens

<400> 5824

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		20						25					30		
Ala	Ala	Leu	Glu	Lys	Gln	Glu	Lys	Gln	Leu	Glu	Leu	Glu	Ile	Lys	Lys
		35					40					45			
Met	Ala	Lys	Ile	Gly	Asn	Lys	Glu	Ala	Cys	Lys	Val	Leu	Ala	Lys	Gln
	50					55					60				
Leu	Val	His	Leu	Arg	Lys	Gln	Lys	Thr	Arg	Thr	Phe	Ala	Val	Ser	Ser
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Lys	Val	Thr	Ser	Met	Ser	Thr	Gln	Thr	Lys	Val	Met	Asn	Ser	Gln	Met
			85						90					95	
Lys	Met	Ala	Gly	Ala	Met	Ser	Thr	Thr	Ala	Lys	Thr	Met	Gln	Ala	Val
			100					105					110		
Asn	Lys	Lys	Met	Asp	Pro	Gln	Lys	Thr	Leu	Gln	Thr	Met	Gln	Asn	Phe
		115					120					125			
Gln	Lys	Glu	Asn	Met	Lys	Met	Glu	Met	Thr	Glu	Glu	Met	Ile	Asn	Asp
	130					135					140				
Thr	Leu	Asp	Asp	Ile	Phe	Asp	Gly	Ser	Asp	Asp	Glu	Glu	Glu	Ser	Gln
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Asp	Ile	Val	Asn	Gln	Val	Leu	Asp	Glu	Ile	Gly	Ile	Glu	Ile	Ser	Gly
			165					170					175		
Lys	Met	Ala	Lys	Ala	Pro	Ser	Ala	Ala	Arg	Ser	Leu	Pro	Ser	Ala	Ser
			180					185					190		
Thr	Ser	Lys	Ala	Thr	Ile	Ser	Asp	Glu	Glu	Ile	Glu	Arg	Gln	Leu	Lys
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<210> 5825

<211> 1940

<212> DNA

<213> Homo sapiens

<400> 5825

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<210> 5826

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5826

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Gly	Val	Ser	Pro	Ser	Glu	Ala	Ser	Leu	His	Cys	Val	Lys	Glu	Ala	Pro
			20					25					30		
Ser	Cys	Ser	Arg	Gly	Leu	Leu	Pro	Pro	Leu	Pro	Ile	Pro	Ser	Pro	Val
			35				40					45			
Lys	Cys	Leu	Cys	Phe	Ala	Tyr	Cys	Val	Trp	Met	Cys	Val	Cys	Val	Cys
			50				55				60				
Val	Cys	Val	Cys	Val	Cys	Val	Cys	Phe	Cys	Val	Cys	Leu	Met	Leu	Cys
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Leu	Leu	Val	Thr	Glu	Ala	Ser	Lys								
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<210> 5827

<211> 428

<212> DNA

<213> Homo sapiens

<400> 5827

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<211> 106
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Trp Glu Arg Pro Leu Phe Ile Lys Leu Gly Phe Phe Leu Ile Ser Leu
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 Pro Asn Val Val Ser Gln Tyr Ser Ser Tyr Ser Ser Leu Gln Gly Val
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 Asn Leu Asp Ser Leu Ala Cys Cys Asp Pro
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 <211> 5747
 <212> DNA
 <213> Homo sapiens

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 gtgctgaaat ctgcaacact gtgtagcctg ccactctgcc caccatttat accactcaac
 480
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 gatgacttaa aagaaagggt tgcaaagatt catatcagtg tatctgaacc tattattcca
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 780
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<210> 5834
 <211> 268
 <212> PRT
 <213> Homo sapiens

<400> 5834
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 Gly Ser Ala Ile Glu Thr Cys Pro Lys Gly Asp Glu Pro Arg Gly Asp
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 Glu Gln Gln Val Glu Ser Met Thr Pro Lys Pro Val Leu Gln Glu Glu
 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
 65 70 75 80
 Leu Glu Phe Leu Arg Arg Val Pro Leu Gly Phe Ser Ala Pro Pro Asp

								85				90				95			
Gly	Leu	Pro	Gln	Val	Pro	His	Met	Ala	Tyr	Cys	Ala	Leu	Glu	Asn	Leu				
				100				105				110							
Tyr	Leu	Leu	Met	Gly	Arg	Glu	Leu	Glu	Tyr	Leu	Glu	Glu	Val	Pro	Pro				
				115				120				125							
Gly	Asn	Val	Leu	Gly	Ile	Gly	Gly	Leu	Gln	Asp	Phe	Val	Leu	Lys	Ser				
				130				135				140							
Ala	Thr	Leu	Cys	Ser	Leu	Pro	Ser	Cys	Pro	Pro	Phe	Ile	Pro	Leu	Asn				
				145				150				155				160			
Phe	Glu	Ala	Thr	Pro	Ile	Val	Arg	Val	Ala	Val	Glu	Pro	Lys	His	Pro				
				165				170				175							
Ser	Glu	Met	Pro	Gln	Leu	Val	Lys	Gly	Met	Lys	Leu	Leu	Asn	Gln	Ala				
				180				185				190							
Asp	Pro	Cys	Val	Gln	Ile	Leu	Ile	Gln	Glu	Thr	Gly	Glu	His	Val	Leu				
				195				200				205							
Val	Thr	Ala	Gly	Glu	Val	His	Leu	Gln	Arg	Cys	Leu	Asp	Asp	Leu	Lys				
				210				215				220							
Glu	Arg	Phe	Ala	Lys	Ile	His	Ile	Ser	Val	Ser	Glu	Pro	Ile	Ile	Pro				
				225				230				235				240			
Phe	Arg	Glu	Thr	Ile	Thr	Lys	Pro	Pro	Lys	Val	Asp	Met	Val	Asn	Glu				
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Glu	Ile	Gly	Lys	Gln	Gln	Lys	Val	Ala	Val	Ile	His								
				260				265											

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<210> 5835
<211> 420
<212> DNA
<213> Homo sapiens
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120
gcactgcata agcaagttct tatgggccca tataatccag acacttgtcc tgagggttgg
180
ttctttgatg tgttggggaa tgacaggagg agagaatggg cagccctggg aaacatgtct
240
aaagaggatg ccatggtgga gtttgtcaag ctcttaaata ggtgttgcca tctcttttca
300
acatatgttg cgtcccaaa aatagagaag gaagagcaag acaaaaaaag gaaggaggaa
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420
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<210> 5836
<211> 140
<212> PRT
<213> Homo sapiens
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<400> 5836
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Ala Leu Arg Phe Phe Lys Glu Lys Asp Gly Lys Ala Phe His Pro Thr

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      20      25      30
Tyr Glu Glu Lys Leu Lys Leu Val Ala Leu His Lys Gln Val Leu Met
      35      40      45
Gly Pro Tyr Asn Pro Asp Thr Cys Pro Glu Val Gly Phe Phe Asp Val
      50      55      60
Leu Gly Asn Asp Arg Arg Arg Glu Trp Ala Ala Leu Gly Asn Met Ser
65      70      75      80
Lys Glu Asp Ala Met Val Glu Phe Val Lys Leu Leu Asn Arg Cys Cys
      85      90      95
His Leu Phe Ser Thr Tyr Val Ala Ser His Lys Ile Glu Lys Glu Glu
      100      105      110
Gln Asp Lys Lys Arg Lys Glu Glu Glu Arg Arg Arg Arg Glu Glu
      115      120      125
Glu Glu Arg Glu Arg Leu Gln Lys Glu Glu Glu Lys
      130      135      140

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<210> 5837
 <211> 582
 <212> DNA
 <213> Homo sapiens

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<400> 5837
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120
tgggccaagg gggacatcca gggggcaggg gccgcctccc gccgtgcctt cctgctgggg
180
gtcctcgccg tcgggctggg cgtgtgcacg tatgcggtg ccctggtgac cctggccgcc
240
taccttgctt cccgagaccc gccctagttg cccctacagc cctcactgtg aacctgagg
300
ccggcagccc agcaaactct tgggcagaga gtggagaatc ttggtggatg aggctgcggc
360
ggcggcagga gcatctagaa acgggagcga gctggactgg aaccttccc ctctctggcc
420
accgctcttc gggcggcagc aacctgagat taaacaccag acacccttgg cctgggctca
480
cgaggaaggg gctgcagttc tccaaggatt cccgctgct cccagatccc cgggagtcgt
540
aggaaccgtt tcttgacgc tgacgtcggc ttccagggat cc
582

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<210> 5838
 <211> 88
 <212> PRT
 <213> Homo sapiens

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<400> 5838
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1      5      10      15
Phe Ser Met Leu Cys Cys Phe Trp Pro Val Gly Ile Ala Ala Phe Cys
20      25      30
Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

```



```

      35              40              45
Ala Gly Ala Ala Ser Arg Arg Ala Phe Leu Leu Gly Val Leu Ala Val
      50              55              60
Gly Leu Gly Val Cys Thr Tyr Ala Ala Ala Leu Val Thr Leu Ala Ala
      65              70              75              80
Tyr Leu Ala Ser Arg Asp Pro Pro
      85

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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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120
cattcgaatg catcccaacc agtgetcagc tgcgtaacga catggagaga ggcagggggg
180
aatagaaagc aaatttaaaa acaccaacac ccaaacacac aagactgcac acaagaaaaa
240
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480
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1140
cgtttcccta aagaatcacc cagatcttaa ctgccctctc cactttcttt ttttttcccc
1200

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 1380
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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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Asn	Asp	Thr	Pro	Gly	Ala	Leu	Leu	Arg	Gly	Glu	Asp	Arg	Cys	Trp	Phe
			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
		35					40					45			
Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
		50			55					60					
Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
65				70				75						80	
Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
			85					90					95		
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
		100					105					110			
Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841
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<210> 5842

<211> 460

<212> PRT

<213> Homo sapiens

<400> 5842

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			20					25					30		
Thr	Leu	Trp	Gly	His	Glu	Asn	Pro	Phe	Ser	Asp	Leu	Pro	Ser	Gly	Thr
			35				40					45			
Leu	Asn	Phe	His	Pro	Val	Trp	Thr	Ser	Arg	Thr	Cys	Ser	Arg	Pro	Pro
						55					60				
Phe	Cys	Leu	Ser	Gln	Ile	Val	Gln	Leu	Lys	Ala	Ile	Asn	Val	Asp	Leu
65					70					75					80
Gln	Ser	Asp	Ala	Ala	Leu	Gln	Val	Asp	Ile	Ser	Asp	Ala	Leu	Ser	Glu
				85					90					95	
Arg	Asp	Lys	Val	Lys	Phe	Thr	Val	His	Thr	Lys	Ser	Ser	Leu	Pro	Asn
				100					105					110	
Phe	Lys	Gln	Asn	Glu	Phe	Ser	Val	Val	Arg	Gln	His	Glu	Glu	Phe	Ile
				115				120				125			
Trp	Leu	His	Asp	Ser	Phe	Val	Glu	Asn	Glu	Asp	Tyr	Ala	Gly	Tyr	Ile
						135					140				
Ile	Pro	Pro	Ala	Pro	Pro	Arg	Pro	Asp	Phe	Asp	Ala	Ser	Arg	Glu	Lys
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Leu	Gln	Lys	Leu	Gly	Glu	Gly	Glu	Gly	Ser	Met	Thr	Lys	Glu	Glu	Phe
				165					170					175	
Thr	Lys	Met	Lys	Gln	Glu	Leu	Glu	Ala	Glu	Tyr	Leu	Ala	Ile	Phe	Lys
				180				185					190		
Lys	Thr	Val	Ala	Met	His	Glu	Val	Phe	Leu	Cys	Arg	Val	Ala	Ala	His
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Pro	Ile	Leu	Arg	Arg	Asp	Leu	Asn	Phe	His	Val	Phe	Leu	Glu	Tyr	Asn
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Gln	Asp	Leu	Ser	Val	Arg	Gly	Lys	Asn	Lys	Lys	Glu	Lys	Leu	Glu	Asp
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Phe	Phe	Lys	Asn	Met	Val	Lys	Ser	Ala	Asp	Gly	Val	Ile	Val	Ser	Gly
				245					250					255	
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				260				265					270		
Glu	Tyr	His	Asn	Arg	Val	Lys	Asp	Ala	Ser	Ala	Lys	Ser	Asp	Arg	Met
				275				280				285			
Thr	Arg	Ser	His	Lys	Ser	Ala	Ala	Asp	Asp	Tyr	Asn	Arg	Ile	Gly	Ser
						295					300				
Ser	Leu	Tyr	Ala	Leu	Gly	Thr	Gln	Asp	Ser	Thr	Asp	Ile	Cys	Lys	Phe

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Arg Val Ser Ala Asp Glu Asp Leu Lys Leu Ser Asp Leu Leu Lys Tyr
          340          345          350
Tyr Leu Arg Glu Ser Gln Ala Ala Lys Asp Leu Leu Tyr Arg Arg Ser
          355          360          365
Arg Ser Leu Val Asp Tyr Glu Asn Ala Asn Lys Ala Leu Asp Lys Ala
          370          375          380
Arg Ala Lys Asn Lys Asp Val Leu Gln Ala Glu Thr Ser Gln Gln Leu
385          390          395          400
Cys Cys Gln Lys Phe Glu Lys Ile Ser Glu Ser Ala Lys Gln Glu Leu
          405          410          415
Ile Asp Phe Lys Thr Arg Arg Val Ala Ala Phe Arg Lys Asn Leu Val
          420          425          430
Glu Leu Ala Glu Leu Glu Leu Lys His Ala Lys Gly Asn Leu Gln Leu
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Leu Gln Asn Cys Leu Ala Val Leu Asn Gly Asp Thr
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<210> 5843
 <211> 6446
 <212> DNA
 <213> Homo sapiens

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840

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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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			20					25					30		
Cys	Thr	Gln	Thr	Gly	His	Ala	Gln	Pro	Cys	Pro	Ser	Ala	Pro	Ser	Thr
		35					40					45			
Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
	50					55					60				
Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
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			85					90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
			100					105					110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
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Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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      20           25           30
Leu Thr Lys Gly Thr Ser Ala Ala His Leu Asn Ser Met Glu Val Thr
      35           40           45
Thr Glu Asp Thr Ser Arg Thr Asp Ala Tyr Glu Ser Tyr Lys Lys Lys
      50           55           60
Asp Tyr Thr Gln Val Asp Tyr Leu Ile Asn Gly Met Tyr Ala Asp Ser
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Glu Met

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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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180

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<210> 5854
 <211> 68
 <212> PRT
 <213> Homo sapiens

<400> 5854
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 Arg Thr Pro Pro Arg Leu Leu Pro Thr Leu Cys Pro Val Thr Pro Val
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 Ser Trp Pro Leu
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<210> 5855
 <211> 362
 <212> DNA
 <213> Homo sapiens

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 360
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 362

<210> 5856
 <211> 113
 <212> PRT

<213> Homo sapiens

<400> 5856

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 20 25 30
 Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35 40 45
 Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50 55 60
 His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65 70 75 80
 Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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Ile	Leu	Ala	Arg	Gly	Gly	Ser	Lys	Gly	Ile	Pro	Leu	Lys	Asn	Ile	Lys
	50				55				60						
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65				70				75					80		
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
			85				90					95			
Ile	Glu	Asn	Val	Ala	Lys	Gln	Phe	Gly	Ala	Gln	Val	His	Arg	Arg	Ser
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Ser	Glu	Val	Ser	Lys	Asp	Ser	Ser	Thr	Ser	Leu	Asp	Ala	Ile	Ile	Glu

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Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His
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Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu
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Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp
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Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu
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Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu
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Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn
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Val Lys Asp Ala Ile Gly Ile Ser Leu Leu Lys Lys Ser Gly Ile Glu
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Val Arg Leu Ile Ser Glu Arg Ala Cys Ser Lys Gln Thr Leu Ser Ser
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Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala
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Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val
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Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val
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Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala
385              390              395              400
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu
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Gln Lys

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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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 35 40 45
 Gln Met Gly Leu Gly Arg Cys Arg Phe Cys Phe Ser Pro Trp Leu Pro
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 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
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 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
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 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
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 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
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 <212> DNA
 <213> Homo sapiens

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<211> 131

<212> PRT

<213> Homo sapiens

<400> 5868

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Leu	Lys	Asp	Lys	Lys	Leu	Ile	Lys	Ala	Phe	Phe	Glu	Val	Leu	Ala	His
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Pro	Gln	Asn	Tyr	Phe	Lys	Tyr	Thr	Glu	Lys	His	Lys	Glu	Met	Leu	Pro
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<211> 910

<212> DNA

<213> Homo sapiens

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 <212> PRT
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 50 55 60
 His Val Phe Gly Ser Ala Ala Asn Leu Phe Ser Cys Ala Ile Asp Gln
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 Val Phe Pro Asn Glu Gly Cys Leu Pro Tyr Ser Cys Gln Glu Pro Asn
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<210> 5871
 <211> 2217
 <212> DNA
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<211> 578

<212> PRT

<213> Homo sapiens

<400> 5872

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Ser	Glu	Asp	Gly	Ser	Tyr	Gly	Thr	Asp	Val	Thr	Arg	Cys	Ile	Cys	Gly
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Phe	Thr	His	Asp	Asp	Gly	Tyr	Met	Ile	Cys	Cys	Asp	Lys	Cys	Ser	Val
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Trp	Gln	His	Ile	Asp	Cys	Met	Gly	Ile	Asp	Arg	Gln	His	Ile	Pro	Asp
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Thr	Tyr	Leu	Cys	Glu	Arg	Cys	Gln	Pro	Arg	Asn	Leu	Asp	Lys	Glu	Arg
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Thr	Ser	Ala	Thr	Glu	Ser	Gly	Asp	Glu	Val	Pro	Val	Glu	Leu	Tyr	Thr
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Leu Pro Pro Asp Ala Leu Ile Ile Glu Tyr Arg Gly Lys Phe Met Leu
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<210> 5873

<211> 3463

<212> DNA

<213> Homo sapiens

<400> 5873

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<212> PRT

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His Glu Thr Arg Gly Gln Asn Ser Asn Ala Leu Pro Ser Val Leu Leu		
	1140	1145
Glu Leu Leu Ser Gln Ser Cys Leu Ile Pro Ala Met Ser Ser Tyr Leu		
	1155	1160
Arg Asn Asp Ser Val Leu Asp Met Ala Arg His Val Pro Leu Tyr Arg		
	1170	1175
Ala Leu Leu Glu Leu Leu Arg Ala Ile Ala Ser Cys Ala Ala Met Val		
1185	1190	1195
Pro Leu Leu Leu Pro Leu Ser Thr Glu Asn Gly Glu Glu Glu Glu		
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Gln Ser Glu Cys Gln Thr Ser Val Gly Thr Leu Leu Ala Lys Met Lys		
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Thr Cys Val Asp Thr Tyr Thr Asn Arg Leu Arg Ser Lys Arg Glu Asn		
	1235	1240
Val Lys Thr Gly Val Lys Pro Asp Ala Ser Asp Gln Glu Pro Glu Gly		
	1250	1255
Leu Thr Leu Leu Val Pro Asp Ile Gln Lys Thr Ala Glu Ile Val Tyr		
1265	1270	1275
Ala Ala Thr Thr Ser Leu Arg Arg Ala Asn Gln Glu Lys Lys Leu Gly		
	1285	1290
Glu Tyr Ser Lys Lys Ala Ala Met Lys Pro Lys Pro Leu Ser Val Leu		
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Lys Ser Leu Glu Glu Lys Tyr Val Ala Val Met Lys Lys Leu Gln Phe		
	1315	1320
Asp Thr Phe Glu Met Val Ser Glu Asp Glu Asp Gly Lys Leu Gly Phe		
	1330	1335
Lys Val Asn Tyr His Tyr Met Ser Gln Val Lys Asn Ala Asn Asp Ala		
1345	1350	1355
Asn Ser Ala Ala Arg Ala Arg Arg Leu Ala Gln Glu Ala Val Thr Leu		

1365 1370 1375
 Ser Thr Ser Leu Pro Leu Ser Ser Ser Ser Val Phe Val Arg Cys
 1380 1385 1390
 Asp Glu Glu Arg Leu Asp Ile Met Lys Val Leu Ile Thr Gly Pro Ala
 1395 1400 1405
 Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro
 1410 1415 1420
 Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly
 1425 1430 1435 1440
 Gly His Ser Val Arg Phe Asn Pro Asn Leu Tyr Asn Asp Gly Lys Val
 1445 1450 1455
 Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp
 1460 1465 1470
 Asn Pro Gln Thr Ser Ser Phe Leu Gln Val Leu Val Ser Val Gln Ser
 1475 1480 1485
 Leu Ile Leu Val Ala Glu Pro Tyr Phe Asn Glu Pro Gly Tyr Glu Arg
 1490 1495 1500
 Ser Arg Gly Thr Pro Ser Gly Thr Gln Ser Ser Arg Glu Tyr Asp Gly
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 1525 1530 1535
 Asn Pro Ser Pro Cys Phe Lys Glu Val Ile His Lys His Phe Tyr Leu
 1540 1545 1550
 Lys Arg Val Glu Ile Met Ala Gln Cys Glu Glu Trp Ile Ala Asp Ile
 1555 1560 1565
 Gln Gln Tyr Ser Ser Asp Lys Arg Val Gly Arg Thr Met Ser His His
 1570 1575 1580
 Ala Ala Ala Leu Lys Arg His Thr Ala Gln Leu Arg Glu Glu Leu Leu
 1585 1590 1595 1600
 Lys Leu Pro Cys Pro Glu Gly Leu Asp Pro Asp Thr Asp Ala Pro
 1605 1610 1615
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<210> 5877
 <211> 683
 <212> DNA
 <213> Homo sapiens

<400> 5877
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 420
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 480
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<210> 5878

<211> 227

<212> PRT

<213> Homo sapiens

<400> 5878

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Ala	Gly	Leu	Gly	Gly	Ser	Met	Arg	Ser	Val	Val	Gly	Phe	Leu	Ser	Gln
		20					25						30		
Arg	Gly	Leu	His	Gly	Asp	Pro	Leu	Leu	Thr	Gln	Asp	Phe	Gln	Arg	Arg
		35					40					45			
Arg	Leu	Arg	Gly	Cys	Arg	Asn	Leu	Tyr	Lys	Lys	Asp	Leu	Leu	Gly	His
		50				55					60				
Phe	Gly	Cys	Val	Asn	Ala	Ile	Glu	Phe	Ser	Asn	Asn	Gly	Gly	Gln	Trp
		65			70					75				80	
Leu	Val	Ser	Gly	Gly	Asp	Asp	Arg	Arg	Val	Leu	Leu	Trp	His	Met	Glu
			85						90					95	
Gln	Ala	Ile	His	Ser	Arg	Val	Lys	Pro	Ile	Gln	Leu	Lys	Gly	Glu	His
			100					105						110	
His	Ser	Asn	Ile	Phe	Cys	Leu	Ala	Phe	Asn	Ser	Gly	Asn	Thr	Lys	Val
		115					120					125			
Phe	Ser	Gly	Gly	Asn	Asp	Glu	Gln	Val	Ile	Leu	His	Asp	Val	Glu	Ser
		130				135					140				
Ser	Glu	Thr	Leu	Asp	Val	Phe	Ala	His	Glu	Asp	Ala	Val	Tyr	Gly	Leu
			145			150				155				160	
Ser	Val	Ser	Pro	Val	Asn	Asp	Asn	Ile	Phe	Ala	Ser	Ser	Ser	Asp	Asp
			165					170						175	
Gly	Arg	Val	Leu	Ile	Trp	Asp	Ile	Arg	Glu	Ser	Pro	His	Gly	Glu	Pro
			180					185						190	
Phe	Cys	Trp	Ala	Asn	Tyr	Pro	Ser	Ala	Phe	His	Ser	Val	Met	Phe	Asn
		195					200					205			
Pro	Val	Glu	Pro	Arg	Leu	Leu	Ala	Pro	Ala	Asn	Ser	Lys	Glu	Gly	Val
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<210> 5879

<211> 1555

<212> DNA

<213> Homo sapiens

<400> 5879

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300
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360
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<210> 5880

<211> 185

<212> PRT

<213> Homo sapiens

<400> 5880

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      20             25             30
Gly Ser Gln Lys Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr
      35             40             45
Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
      50             55             60
Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
      65             70             75             80
His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
      85             90             95
Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
      100            105            110
His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
      115            120            125
Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
      130            135            140
Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
      145            150            155            160
Leu Ala Ser Leu Arg Tyr Trp Trp Arg Arg Cys Cys Pro Ile Ala Arg
      165            170            175
Leu Trp Glu Ser Thr Gly Leu Arg Ala
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<210> 5881

<211> 327

<212> DNA

<213> Homo sapiens

<400> 5881

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<210> 5882

<211> 109

<212> PRT

<213> Homo sapiens

<400> 5882

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 20          25          30
Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
 35          40          45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
 50          55          60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
 65          70          75          80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
 85          90          95
Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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120
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180
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240
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300
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360
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480
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu Ser Arg Phe

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[illegible]

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<210> 5885
<211> 1905
<212> DNA
<213> Homo sapiens
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120					
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180					
cccgtgaag	gatgtttcc	ctcgaaagg	cgtagacgc	gtcagaatc	gtttttcagt
240					
gagttttg	ccctccgac	ctccgtctt	gacagaatc	cggcgttct	cgtacccgcc
300					
catectccg	ggacgcccg	tgccatggc	actctgtgc	gccctgtct	ccgtcggctc
360					
tgcgggctc	cgggcctaca	ggggcctgc	gcagaaatg	ccctccggg	taggagcgac
420					
gggcgccgc	cgctatact	gcaccacct	cccacctcc	cgctgcagaa	agcgctgtt
480					
gccgcggct	ccgcggcgat	ggcgctctat	aacccctacc	gccacgacat	ggtcgcagtt
540					
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600					
ccagagggg	cccagatct	gcaggagcgt	ccccggattt	cgacatccac	cctcgacctg
660					
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720					
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780					
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1020					
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1140					
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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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 20 25 30
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 35 40 45
 Lys Ala Leu Leu Ala Ala Gly Ser Ala Ala Met Ala Leu Tyr Asn Pro
 50 55 60
 Tyr Arg His Asp Met Val Ala Val Leu Gly Glu Thr Thr Gly His Arg
 65 70 75 80
 Thr Leu Lys Val Leu Arg Asp Gln Met Arg Arg Asp Pro Glu Gly Ala
 85 90 95
 Gln Ile Leu Gln Glu Arg Pro Arg Ile Ser Thr Ser Thr Leu Asp Leu
 100 105 110
 Gly Lys Leu Gln Ser Leu Pro Glu Gly Ser Leu Gly Arg Glu Tyr Leu
 115 120 125
 Arg Phe Leu Asp Val Asn Arg Val Ser Pro Asp Thr Arg Ala Pro Thr
 130 135 140
 Arg Phe Val Asp Asp Glu Glu Leu Ala Tyr Val Ile Gln Arg Tyr Arg
 145 150 155 160
 Glu Val His Asp Met Leu His Thr Leu Leu Gly Met Pro Thr Asn Ile
 165 170 175
 Leu Gly Glu Ile Val Val Lys Trp Phe Glu Ala Val Gln Thr Gly Leu

180	185	190
Pro Met Cys Ile Leu Gly Ala Phe Phe Gly Pro Ile Arg Leu Gly Ala		
195	200	205
Gln Ser Leu Gln Val Leu Val Ser Glu Leu Ile Pro Trp Ala Val Gln		
210	215	220
Asn Gly Arg Arg Ala Pro Cys Val Leu Asn Leu Tyr Tyr Glu Arg Arg		
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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1080

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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			20					25					30		
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
			35				40					45			
Glu	Thr	Lys	His	Arg	Val	Ser	Met	Glu	Val	Ala	Ala	Ala	Lys	Gly	Leu
			50				55				60				
Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
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<210> 5889
<211> 2198
<212> DNA
<213> Homo sapiens
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<400> 5889
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1080

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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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 35 40 45
 Ser Ser His Ser Pro Thr Ser Ala Ser Gln Ala Val Gly Thr Thr Gly
 50 55 60
 Glu Glu Arg Gln Gln His Gly Glu Cys Pro Val Pro Thr Pro Trp Lys

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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			20					25					30			
Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala	
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Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln	
				85					90					95		
Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly	
			100					105					110			
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met	
		115					120					125				
Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu	
		130					135					140				
Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr	
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Ala	Val	Val	Trp	Gly	Leu	Val	Leu	Trp	Leu	Phe	Glu	Tyr	His	Arg	Ser	
				165					170					175		
Thr	Leu	Gln	Pro	Ser	Leu	Gln	Ser	Ser	Met	Thr	Tyr	Leu	Tyr	Glu	Asp	
			180					185						190		
Ser	Asn	Val	Trp	His	Asp	Ile	Ser	Asp	Phe	Leu	Val	Tyr	Asn	Lys	Ser	
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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			20					25					30		
Arg	Arg	Lys	Lys	Lys	Lys	Ala	Lys	Arg	Thr	Thr	Asn	Trp	Lys	Ile	Ile
		35					40					45			
Thr	Asp	Arg	Pro	Gly	Phe	His	Asp	Glu	Ser	Ala	Ile	Tyr	Pro	Val	Gly
	50					55					60				
Tyr	Cys	Ser	Thr	Arg	Ile	Tyr	Ala	Ser	Met	Lys	Cys	Pro	Asp	Gln	Lys
65					70					75				80	
Cys	Leu	Tyr	Thr	Cys	Gln	Ile	Lys	Asp	Gly	Gly	Val	Gln	Pro	Gln	Phe
				85					90					95	
Glu	Ile	Val	Pro	Glu	Asp	Asp	Pro	Gln	Asn	Ala	Ile	Val	Ser	Ser	Ser
			100					105					110		
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		115					120					125			
Gly	Lys	Leu	Met	Pro	Asn	Leu	Leu	Pro	Ala	Gly	Ala	Asp	Phe	Phe	Gly
	130					135					140				
Phe	Ser	His	Pro	Ala	Ile	His	Asn	Leu	Ile	Gln	Ser	Cys	Pro	Gly	Ala
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Arg	Lys	Cys	Ile	Asn	Tyr	Gln	Trp	Val	Lys	Phe	Asp	Val	Cys	Lys	Pro
			165						170				175		
Gly	Asp	Gly	Gln	Leu	Pro	Glu	Gly	Leu	Pro	Glu	Asn	Asp	Ala	Ala	Met
			180					185					190		
Ser	Phe	Glu	Ala	Phe	Gln	Arg	Gln	Ile	Phe	Asp	Glu	Asp	Gln	Asn	Asp
	195					200						205			
Pro	Leu	Leu	Pro	Gly	Ser	Leu	Asp	Leu	Pro	Glu	Leu	Gln	Pro	Ala	Ala
	210					215					220				
Phe	Val	Ser	Ser	Tyr	Gln	Pro	Met	Tyr	Leu	Thr	His	Glu	Pro	Leu	Val
225					230					235				240	
Asp	Thr	His	Leu	Gln	His	Leu	Lys	Ser	Pro	Ser	Gln	Gly	Ser	Pro	Ile
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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360

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420